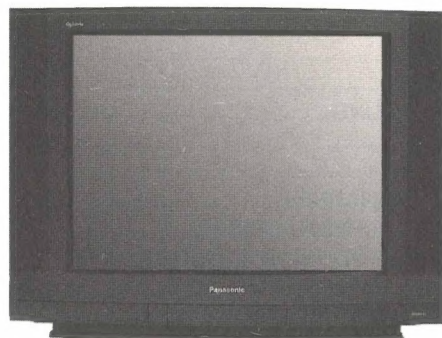


Service Manual



Colour Television

TX-28LK10F

TX-28SK10F

TX-25LK10F

EURO- 4H Chassis

SPECIFICATIONS

(Information in brackets [] refers to model TX-28SK10F)
(Information in brackets { } refers to model TX-25LK10F)

Power Source: 220-240V a.c., 50Hz
Power Consumption: 121W {103W}
Standby Power Consumption: 1,4W
Aerial Impedance: 75Ω unbalanced, Coaxial Type
Receiving System: PAL-I, B/G, H, D/K, PAL-525/60
SECAM B/G, D/K, L/L'
M. NTSC (AV only)
NTSC (AV only)

Receiving Channels:
VHF E2-E12 VHF H1-H2 (ITALY)
VHF A-H (ITALY) VHF R1-R2
VHF R3-R5 VHF R6-R12
UHF E21-E69 CATV (S01-S05)
CATV S1-S10 (M1-M10) CATV S11-S20 (U1-U10)
CATV S21-S41 (HYPERBAND)

Intermediate Frequency:
Video 38,9MHz, 33,9MHz
Sound 33,4MHz (B/G), 33,16MHz (A2)
33,05MHz (NICAM B/G, D/K, L)
32,4MHz (D/K), 32,66MHz (CZ STEREO)
32,9MHz (I)
40,4MHz (L'), 39,75MHz (L' NICAM)
34,47MHz (PAL)
34,5MHz, 34,65MHz (SECAM)
38,3MHz, 38,15MHz (SECAM L')

Video/Audio Terminals:
AUDIO MONITOR OUT
AV1 IN Audio (RCAx2) 500mV rms 1kΩ
Video (21 pin) 1V p-p 75Ω
Audio (21 pin) 500mV rms 10kΩ
RGB (21 pin) 0,7V p-p 75Ω
AV1 OUT Video (21 pin) 1V p-p 75Ω
Audio (21 pin) 500mV rms 1kΩ
AV2 IN Video (21 pin) 1V p-p 75Ω
Audio (21 pin) 500mV rms 10kΩ
S-Video IN Y: 1V p-p 75Ω
(21 pin) C: 0,3V p-p 75Ω
AV2 OUT Video (21 pin) 1V p-p 75Ω
Audio (21 pin) 500mV rms 1kΩ
AV3 IN (only TX-28 LK10F and TX-25LK10F)
Audio (RCAx2) 500mV rms 10kΩ
Video (RCAx1) 1V p-p 75Ω

High Voltage: 28kV ±1kV {26kV ±1kV}
Picture Tube: A66ECF50X82 66cm
{A59EAK071X54 59cm}

Audio Output: 2x7W RMS, 2x15W MPO
8Ω Impedance
Headphones 8Ω Impedance
Accessories supplied: Remote Control
2 x R6 (UM3) Batteries

Dimensions:
Height: 575mm {525mm}
Width: 775mm {717mm}
Depth: 460mm {466mm}
Net Weight: 32,5kg {26kg}

Specifications are subject to change without notice.

Weights and dimensions shown are approximate.

NOTE: This Service Manual should be used in conjunction with the EURO-4H technical guide.

TECHNISCHE DATEN

(Die Auskunft in den Klammern [] bezieht sich auf das folgende Modell TX-28SK10F)
(Die Auskunft in den Klammern { } bezieht sich auf das folgende Modell TX-25LK10F)

Netzspannung: 220-240V a.c., 50Hz
Leistungsaufnahme: 121W {103W}
Standby Leistungsaufnahme: 1,4W
Antennenimpedanz: 75Ω asymmetrisch, Koaxial-Typ
Empfangssystem: PAL-I, B/G, H, D/K, PAL-525/60
SECAM B/G, D/K, L/L'
M. NTSC (nur AV Eingang)
NTSC (nur AV Eingang)

Empfangsbereiche:
VHF E2-E12 VHF H1-H2 (ITALY)
VHF A-H (ITALY) VHF R1-R2
VHF R3-R5 VHF R6-R12
UHF E21-E69 CATV (S01-S05)
CATV S1-S10 (M1-M10) CATV S11-S20 (U1-U10)
CATV S21-S41 (HYPERBAND)

Zwischenfrequenz:
Video 38,9MHz, 33,9MHz
Sound 33,4MHz (B/G), 33,16MHz (A2)
33,05MHz (NICAM B/G, D/K, L)
32,4MHz (D/K), 32,66MHz (CZ STEREO)
32,9MHz (I)
40,4MHz (L'), 39,75MHz (L' NICAM)
34,47MHz (PAL)
34,5MHz, 34,65MHz (SECAM)
38,3MHz, 38,15MHz (SECAM L'))

Video/Audio Anschlüsse:
AUDIO MONITOR OUT
AV1 EINGANG Audio (RCAx2) 500mV rms 1kΩ
Video (21 pin) 1V p-p 75Ω
Audio (21 pin) 500mV rms 10kΩ
RGB (21 pin) 0,7V p-p 75Ω
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Audio (21 pin) 500mV rms 10kΩ
S-Video IN Y: 1V p-p 75Ω
(21 pin) C: 0,3V p-p 75Ω
AV2 AUSGANG Video (21 pin) 1V p-p 75Ω
Audio (21 pin) 500mV rms 1kΩ
AV3 EINGANG (nur TX-28 LK10F und TX-25LK10F)
Audio (RCAx2) 500mV rms 10kΩ
Video (RCAx1) 1V p-p 75Ω

Hochspannung: 28kV ±1kV {26kV ±1kV}
Bildrohre: A66ECF50X82 66cm
{A59EAK071X54 59cm}

Ton Ausgangsleistung: 2x7W RMS, 2x15W MPO
Lautsprecher 8Ω Impedanz
Kopfhörer: 8Ω Impedanz
Mittel. Zubehör: Fernbedienung
2 x R6 (UM3) Batterien

Abmessungen:
Höhe: 575mm {525mm}
Breite: 775mm {717mm}
Tiefe: 460mm {466mm}
Gewicht: 32,5kg {26kg}

Änderungen der Technischen Daten vorbehalten.

Gewichte und Abmessungen sind Näherungsangaben.

Hinweis: Bitte verwenden Sie das Service Manual zusammen mit dem Technical Guide.

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SAFETY PRECAUTIONS

GENERAL GUIDE LINES

1. It is advisable to insert an isolation transformer in the a.c. supply before servicing a hot chassis.
2. When servicing, observe the original lead dress in the high voltage circuits. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
3. After servicing, see that all the protective devices such as insulation barriers, insulation papers, shields and isolation R-C combinations are correctly installed.
4. When the receiver is not being used for a long period of time, unplug the power cord from the a.c. outlet.
5. Potentials as high as 29kV {27kV} are present when this receiver is in operation. Operation of the receiver without the rear cover involves the danger of a shock hazard from the receiver power supply. Servicing should not be attempted by anyone who is not familiar with the precautions necessary when working on high voltage equipment. Always discharge the anode of the tube.
6. After servicing make the following leakage current checks to prevent the customer from being exposed to shock hazard.

LEAKAGE CURRENT COLD CHECK

1. Unplug the a.c. cord and connect a jumper between the two prongs of the plug.
2. Turn on the receiver's power switch.
3. Measure the resistance value with an ohmmeter, between the jumpered a.c. plug and each exposed metallic cabinet part on the receiver, such as screw heads, aerials, connectors, control shafts etc. When the exposed metallic part has a return path to the chassis the reading should be between 4M ohm and 20M ohm. When the exposed metal does not have a return path to the chassis the reading must be infinite.

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SICHERHEITSVORKEHRUNGEN

ALLGEMEINE RICHTLINIEN

1. Es ist empfehlenswert einen Trenntransformator in die Stromversorgung zu schalten, bevor Reparaturen an einem Gerät vorgenommen werden, dessen Chassis unter Spannung steht.
2. Bei der Durchführung von Servicearbeiten dürfen die ursprünglichen Kabelanschlüsse nicht vertauscht werden. Dies gilt insbesondere für die Anschlüsse im Hochspannungsteil. Hat sich ein Kurzschluß ereignet, dann sind alle Teile, an denen Spuren von Überhitzung sichtbar sind, auszuwechseln.
3. Nach Beenden der Servicearbeiten ist sicherzustellen, daß alle Sicherheitsvorrichtungen, wie Isolationsstege, Isolationspapiere, Abschirmungen und Isolations -R-C- Glieder wieder richtig eingesetzt sind.
4. Wenn der Fernseher während längerer Zeit nicht in Betrieb gesetzt wird, sollte der Netzstecker aus der Netzsteckdose gezogen werden.
5. Im Betrieb sind Spannungen bis zu 29kV {27kV} in diesem Gerät vorhanden. Die Inbetriebnahme des Fernsehers ohne aufgesetzte Rückwand bringt die Gefahr eines elektrischen Schlages von der Fernseher - Stromversorgung mit sich. Servicearbeiten sollten daher auch nie durch Personen versucht werden, die nicht in vollem Umfang mit den Sicherheitsvorkehrungen beim Umgang mit Hochspannungsgeräten vertraut sind. Vor der Handhabung mit der Bildröhre ist die Anode der Bildröhre immer an dem Empfängerchassis zu entladen.
6. Nach Beenden der Servicearbeiten sind die folgenden Kriechstrom-Prüfungen durchzuführen, um den Kunden vor der Gefahr eines elektrischen Schlages zu schützen.

MESSUNG DES ISOLATIONSWIDERSTANDES IM ABGESCHALTETEN ZUSTAND

1. Den Netzstecker aus der Netzsteckdose ziehen und die beiden Steckerstifte kurzschließen.
2. Den Geräteschalter des Fernsehgerätes einschalten.
3. Mit einem Ohmmeter den Widerstandswert zwischen dem überbrückten Netzkabelstecker und jenem zugänglichen Metallteil am Gehäuse des Fernsehgerätes, wie Schraubenköpfe, Antennen, Achsen der Regler, Griffassungen usw. messen. Wenn ein zugängliches Metallteil keine Rückleitung zum Chassis hat, muß die Anzeige unendlich betragen.

LEAKAGE CURRENT HOT CHECK

1. Plug the a.c. cord directly into the a.c. outlet. Do not use an isolation transformer for this check.
2. Connect a 2k Ω 10W resistor in series with an exposed metallic part on the receiver and an earth, such as a water pipe.
3. Use an a.c. voltmeter with high impedance to measure the potential across the resistor.
4. Check each exposed metallic part and check the voltage at each point.
5. Reverse the a.c. plug at the outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 1,4 V rms. In case a measurement is outside the limits specified, there is a possibility of a shock hazard, and the receiver should be repaired and rechecked before it is returned to the customer.

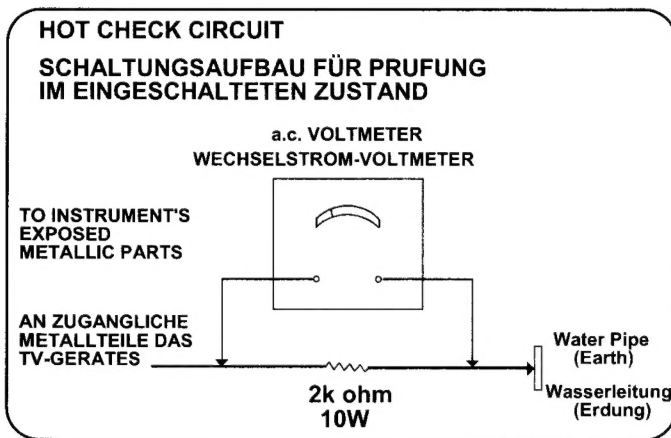


Fig. 1
Abb. 1

X-RADIATION WARNING

1. The potential sources of X-Radiation in TV sets are the high voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure that the jig is capable of handling 29kV {27kV} without causing X-Radiation.

NOTE : It is important to use an accurate periodically calibrated high voltage meter.

1. Set the brightness to minimum.
2. Measure the high voltage. The meter should indicate: 28kV \pm 1kV {26kV \pm 1kV}. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure.
3. To prevent any X-Radiation possibility, it is essential to use the specified tube.

MESSUNG DES KRIECHSTROMS IM EINGESCHALTETEN ZUSTAND

1. Den Netzstecker direkt in eine Netsteckdose stecken. Für diese Messung keinen Trenntransformator verwenden.
2. Einen 2k Ω / 10W-Widerstand in Serie mit einem von außen zugänglichen Metallteil am Fernsehgerät und einer guten, Erdung z.B. Wasserleitung, anschließen.
3. Ein Wechselstrom-Voltmeter mit einem Meßbereich von 1000 Ohm.Volt oder größer verwenden, um die Spannung über den Widerstand zu messen.
4. Jedes zugängliche Metallteil prüfen, und an jedem Punkt dies Spannung messen.
5. Den Netzstecker umgekehrt in die Steckdose stecken und jede der obigen Messungen wiederholen.
6. Die Spannung darf an keinem der Punkte 1,4V eff. überschreiten. Wird dieser Wert nicht eingehalten, besteht die Gefahr eines elektrischen Schlages, und das Fernsehgerät sollte daher repariert und nachgeprüft werden, bevor es an den Kunden zurückgegeben wird.

RÖNTGENSTRAHLUNG ACHTUNG :

1. Potentielle Quellen von Röntgenstrahlung in Fernsehgeräten sind das Hochspannungsteil und die Bildröhre.
2. Bei Verwendung eines Bildröhren-Prüfgerätes für den Service ist sicherzustellen, daß es für die Belastung von 29kV {27kV} geeignet ist, ohne daß eine Röntgenstrahlung verursacht wird.

ANMERKUNG : Es ist wichtig, daß ein präzises, regelmäßig geprüftes Voltmeter verwendet wird.

1. Helligkeit auf Minimum stellen.
2. Die Hochspannung messen. Die Anzeige des Instrumentes sollte: 28kV \pm 1kV {26kV \pm 1kV}. Falls die Anzeige diese Toleranzgrenzen überschreitet, ist die sofortige Behebung nötig, um die Möglichkeit vorzeitigen Komponentenausfalls zu verhüten.
3. Um die Möglichkeit von Röntgenstrahlung zu begrenzen, ist es wichtig, daß nur die vorgeschriebene Bildröhre verwendet wird.

SERVICE HINTS

HOW TO REMOVE THE REAR COVER

1. Remove the 8 screws as shown in Fig. 2.

SERVICE HINWEISE

ENTFERNEN DER GERÄTERÜCKWAND

1. Die 8 Schrauben entfernen, siehe Abb. 2.

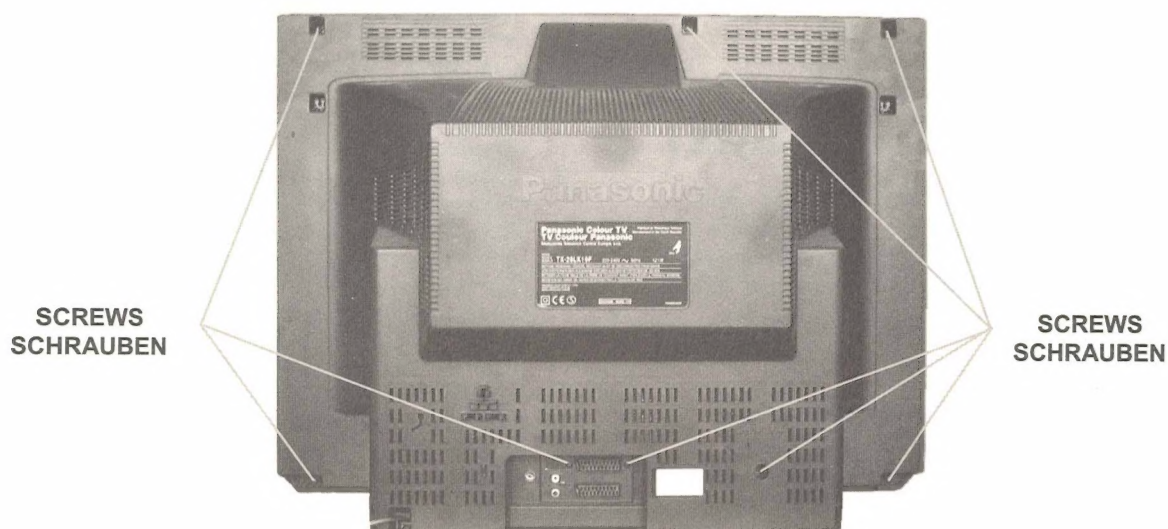


Fig. 2
Abb. 2

LOCATION OF CONTROLS

LAGE DER EINSTELLREGLER

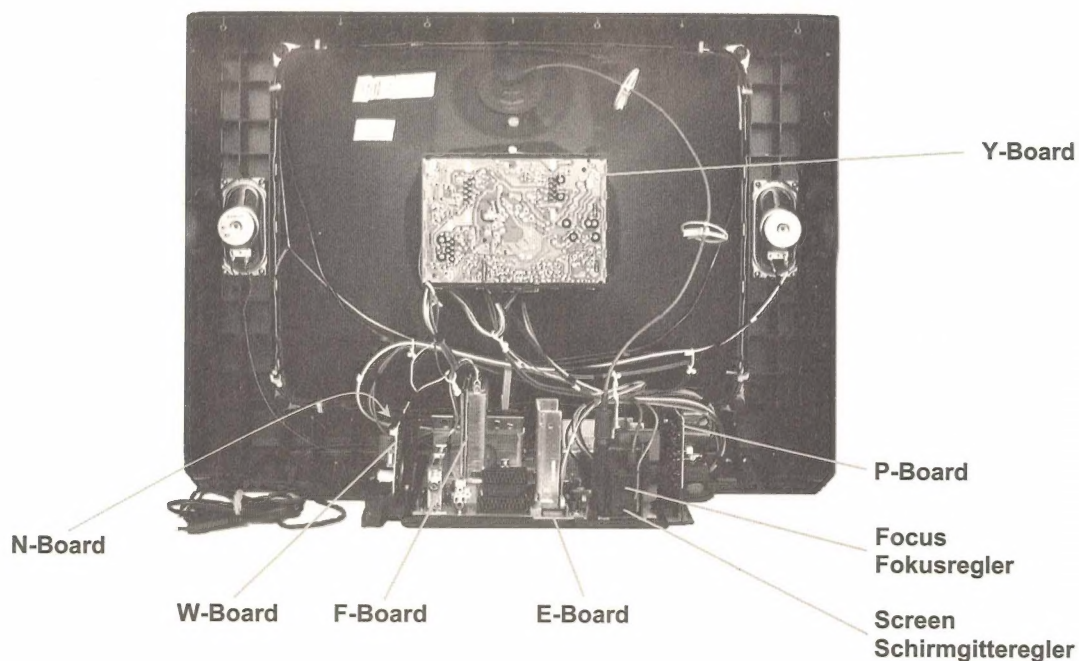


Fig. 3
Abb. 3

HOW TO MOVE THE CHASSIS INTO SERVICE POSITION

1. Remove the bead clumper from the mains lead.
2. Hold and lift the rear of the chassis and gently pull the chassis towards you, as shown in Fig.4.
3. Release the respective wiring clips and rotate the chassis horizontally through 90° anti-clockwise and elevate the front of the chassis.
4. Using the rib (A), as shown Fig .5., locate the chassis to position Fig .6.
5. After servicing ensure all wiring is returned to its original position before returning the receiver to the customer.

SERVICE POSITION FÜR DAS CHASSIS

1. Beseitigen sie das Festklemmen der Hauptleiter.
2. Ergreifen sie den Hinterteil von Chassis und ziehen sie leicht das Chassis in der Richtung zu Ihnen **Abb. 4.**
3. Lösen sie die Klemmen von einschlägigen Leitern (Drähten) und drehen sie das Chassis horizontal um 90° gegen Uhrzeigersinn, dann heben sie den Vorderteil von Chassis nach oben.
4. Mit der Hilfe der Rippe (A), **Abb.5.**, platzieren sie das Chassis in die Lage auf dem **Abb.6.**
5. Vor Rückgabe von TV an den Kunden versichen sie, dass alle Leiter in ihre ursprünglichen Positionen zurückgebracht werden.

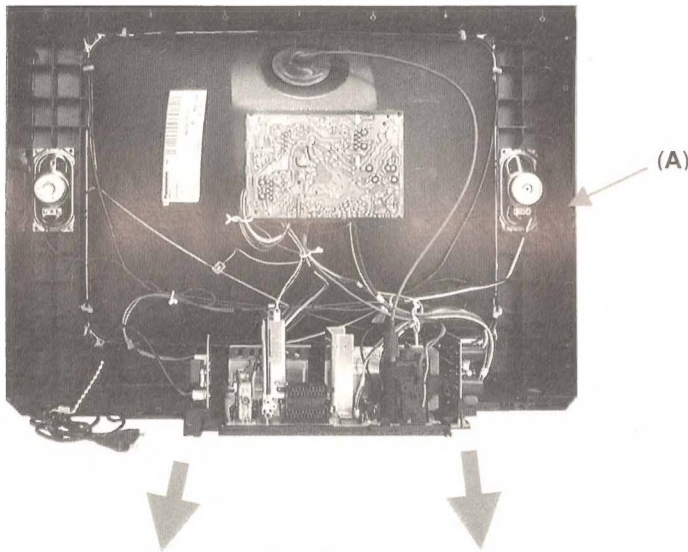


Fig.4 .
Abb.4.

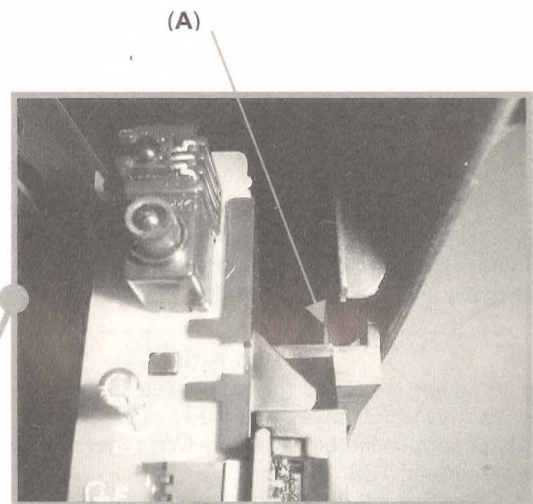


Fig.5 .
Abb.5.

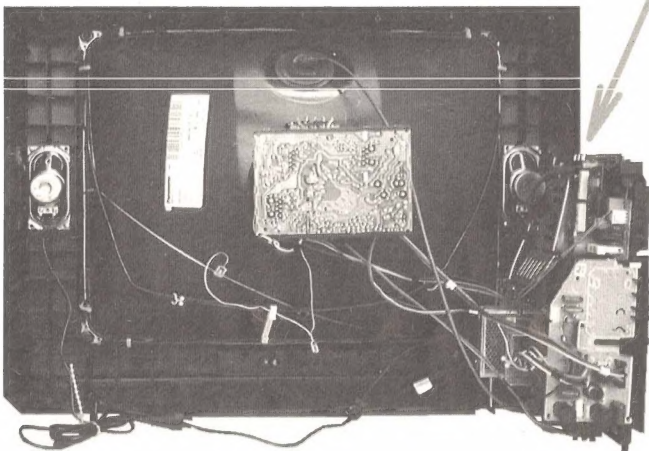


Fig. 6.
Abb.6.

SELF CHECK

1. Self-check is used to automatically check the bus lines and hexadecimal code of the TV set.
2. To get into the Self-Check mode press the down (-V) button on the customer controls at the front of the set, at the same time pressing the **STATUS** button on the remote control, and the screen will show :

VPC	O.K.	PCB	O.K.
CIP	O.K.	CAB	O.K.
SRC	O.K.		
DDP	O.K.		
TUN	O.K.		
E2	O.K.		
MSP	O.K.		
DPL	--		
OPTION1	39	[39]	{39}
OPTION2	1C	[1C]	{1C}
OPTION3	0F	[0F]	{0F}
OPTION4	00	[00]	{00}
OPTION5	ED	[CD]	{ED}
OPTION6	A5	[A5]	{A1}

SELBSTDIAGNOSE

1. Die Selbstdiagnose dient zum automatischen Prüfen der Bus-Leitungen sowie des Hexadezimalcodes des FS-Geräts. Zum Umschalten auf Selbstdiagnose zunächst die Taste "**STATUS**" auf der Fernbedienung und gleichzeitig die-Taste am Bedienteil des FS-Gerätes drücken (-V), auf dem Bildschirm erscheint hierauf :-
2. Nach der Selbstdiagnose wird das Gerät automatisch auf sämtliche werksseitigen Standardeinstellungen zurückgesetzt :

If the CCU ports have been checked and found to be incorrect or not located then " - - " will appear in place of "O.K.". Wenn der Hauptprozessor (CCU) an den Anschlüssen einen Fehler erkennt, oder der entsprechende Anschluss nicht belegt ist, zeigt die entsprechende Position " - - " anstelle von OK an.

Service Aids

To aid in the service of our current chassis there are a number of Service Aids which have been made available.

- **LUCI** interface kit (Linked Utility Computer Interface)
Part number: TZS6EZ002
This contains interface and cables for connecting TV service connector and a PC as well as diagnostic software. As new models are introduced upgrade software will become available.
- **VICI** (Visual Interactive Computer Information)
These C.D.'s contain multimedia documentation providing quick access to service information.
Part No.
TZS7EZ006, TZS7EZ005, TZS8EZ001 & TZS9EZ001
1. Service Manuals
2. Instruction Books
3. Technical Information
- **TASMIN** (Technically Advanced System for Multimedia Interactive Notes)
As well as providing a first step towards more interactive training this product also achieves quick access to Technical Information.

Service-Hilfen

Zur Unterstützung der Servicearbeiten stehen weitere Hilfsmittel zur Verfügung.

- **LUCI** interface kit (PC-unterstütztes Diagnosesystem)
Bestell-Nr.: TZS6EZ002
Es beinhaltet ein Interface, die Anschlusskabel zum FS-Gerät und die Diagnose-Software. Bei Einführung von neuen Modellen ist ein Update der Software jederzeit möglich.
- **VICI** (Interaktive CD-ROM) mit schnellem Zugriff auf Serviceinformationen.
Bestell-Nr.:
TZS7EZ006, TZS7EZ005, TZS8EZ001 & TZS9EZ001
1. Service Manuals
2. Bedienungsanleitungen
3. Technical Information
- **TASMIN** (Technisch erweitertes System für interaktive Multimedia-Hinweise und Notizen)
Genauso wie dieses Produkt einen ersten Schritt in Richtung erweitertes interaktives Training bereitstellt, ermöglicht es einen noch schnelleren Zugang zu technischen Informationen.

ADJUSTMENT PROCEDURE

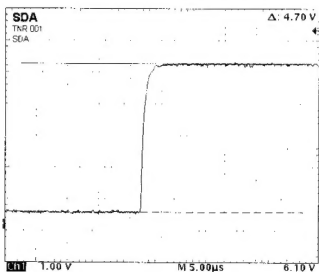
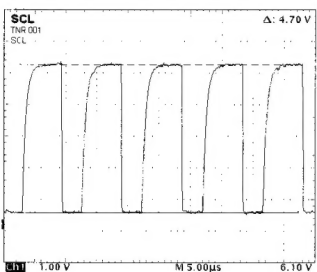
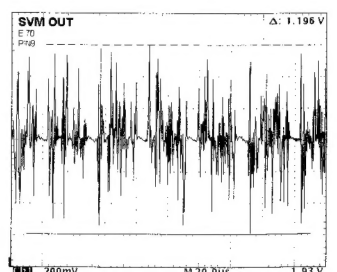
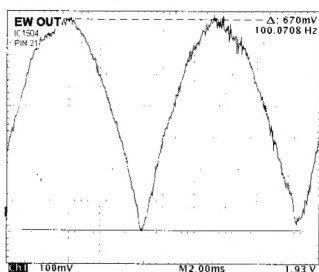
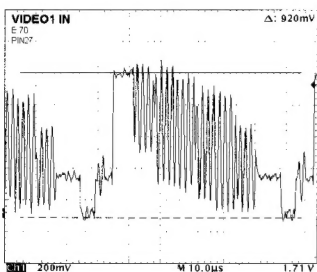
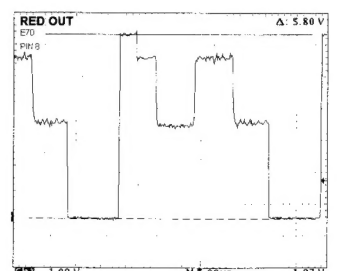
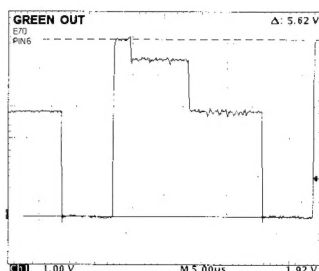
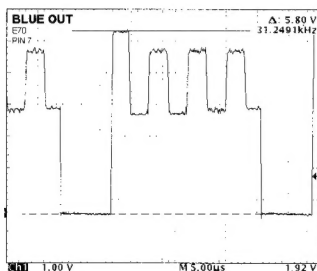
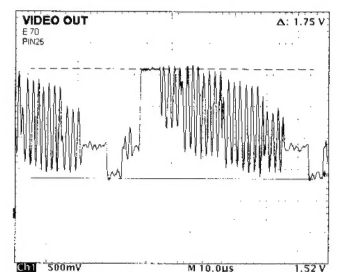
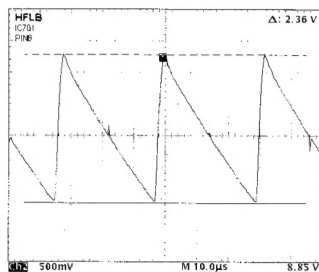
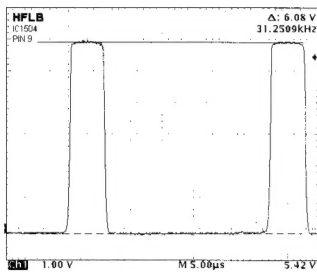
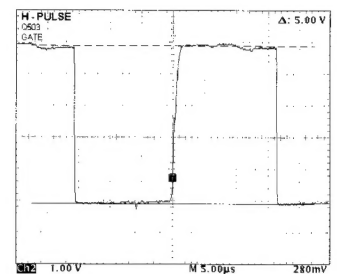
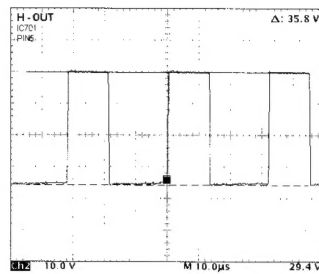
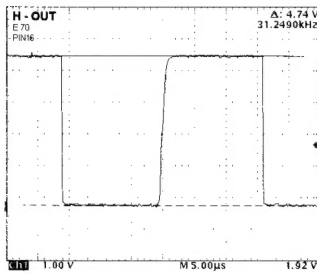
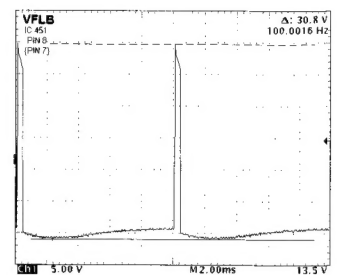
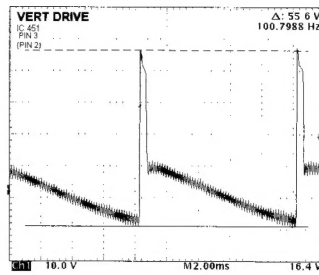
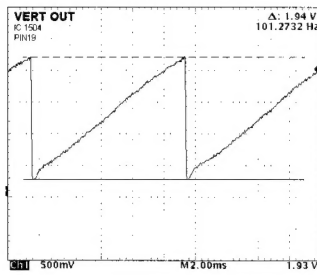
Item/Preparation	Adjustments																
+B SET-UP 1. Receive a Greyscale signal. 2. Set the controls:- Brightness: Minimum Contrast: Minimum Volume: Minimum	1. Confirm the following voltages. <table> <tr> <td>B2 148 ± 2V</td><td>B10 5,25 ± 0,25V</td></tr> <tr> <td>B9 5 ± 0,25V</td><td>B11 33 ± 1,5V</td></tr> <tr> <td>B5 12 ± 0,5V</td><td>B7 8 ± 0,5V</td></tr> <tr> <td>B4 16 ± 1V</td><td>B8 6 ± 1V</td></tr> <tr> <td>B12 26 ± 2V</td><td>B13 13,5 ± 1V</td></tr> <tr> <td>{28 ± 2V}</td><td>{16,5 ± 1V}</td></tr> <tr> <td>B3 36 ± 1,5V</td><td>B14 -14 ± 1V</td></tr> <tr> <td>B1 205 ± 10V</td><td>{-10 ± 1V}</td></tr> </table>	B2 148 ± 2V	B10 5,25 ± 0,25V	B9 5 ± 0,25V	B11 33 ± 1,5V	B5 12 ± 0,5V	B7 8 ± 0,5V	B4 16 ± 1V	B8 6 ± 1V	B12 26 ± 2V	B13 13,5 ± 1V	{28 ± 2V}	{16,5 ± 1V}	B3 36 ± 1,5V	B14 -14 ± 1V	B1 205 ± 10V	{-10 ± 1V}
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{28 ± 2V}	{16,5 ± 1V}																
B3 36 ± 1,5V	B14 -14 ± 1V																
B1 205 ± 10V	{-10 ± 1V}																
Cut-Off / Ug2 Test 1. Receive a Greyscale signal. 2. Degauss the tube externally. 3. Set the TV into Service Mode 1. 4. Select Cutoff mode.	To adjust Cutoff connect an oscilloscope to the Blue cathode. Press " STR " and adjust "cutoff" value using the " Yellow " and " Blue " buttons until the black level is 160V ± 5V, press " STR " to store the value. Remove the oscilloscope. Select Ug2 adjustment and adjust the screen VR until the display shows "O.K."																

ABGLEICH

Vorbereitungen	Abgleich																
+B - Abgleich 1. Testbild empfangen. Helligkeit auf: Minimum Kontrast auf: Minimum Lautstärke: Minimum	1. Folgende Spannungen sind zu überprüfen. <table> <tr> <td>B2 148 ± 2V</td><td>B10 5,25 ± 0,25V</td></tr> <tr> <td>B9 5 ± 0,25V</td><td>B11 33 ± 1,5V</td></tr> <tr> <td>B5 12 ± 0,5V</td><td>B7 8 ± 0,5V</td></tr> <tr> <td>B4 16 ± 1V</td><td>B8 6 ± 1V</td></tr> <tr> <td>B12 26 ± 2V</td><td>B13 13,5 ± 1V</td></tr> <tr> <td>{28 ± 2V}</td><td>{16,5 ± 1V}</td></tr> <tr> <td>B3 36 ± 1,5V</td><td>B14 -14 ± 1V</td></tr> <tr> <td>B1 205 ± 10V</td><td>{-10 ± 1V}</td></tr> </table>	B2 148 ± 2V	B10 5,25 ± 0,25V	B9 5 ± 0,25V	B11 33 ± 1,5V	B5 12 ± 0,5V	B7 8 ± 0,5V	B4 16 ± 1V	B8 6 ± 1V	B12 26 ± 2V	B13 13,5 ± 1V	{28 ± 2V}	{16,5 ± 1V}	B3 36 ± 1,5V	B14 -14 ± 1V	B1 205 ± 10V	{-10 ± 1V}
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B3 36 ± 1,5V	B14 -14 ± 1V																
B1 205 ± 10V	{-10 ± 1V}																
Cut-Off / Ug2 Test 1. Testbild empfangen. 2. Bildröhre entmagnetisieren. 3. Service-Mode 1 anwählen. 4. Im Service-Mode den Abgleichpunkt Cutoff DC-Mode wählen.	Einen Oszillographen an die blaue Katode der Bildröhre anschliessen. STR -Taste drücken und Mit der gelben und blauen Taste den CUT-OFF Wert auf 160V ± 5V abgleichen und mit der STR -Taste abspeichern. Den Oszillograph entfernen und den Ug2 Test aufrufen. Den Abgleichwert solange ändern, bis OK auf dem Bildschirm erscheint. Den Wert abspeichern.																

WAVEFORM PATTERN TABLE

SIGNAL TABELLE



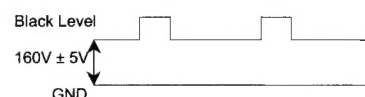
CONDITIONS: CONTRAST...MAX, BRIGHTNESS...MID, COLOUR...MID, SHARPNESS...MID

ALIGNMENT SETTINGS:

(The figures below are nominal and used for representative purposes only.)

1. Set the Bass to maximum position, set the Treble to minimum position, set the Volume to minimum then press the down button (-/v) on the customer controls at the front of the TV and at the same time press the **INDEX** button on the remote control, this will place the TV into the Service Mode.
2. Press the **RED / GREEN** buttons to step up / down through the functions.
3. Press the **YELLOW / BLUE** buttons to alter the function values.
4. Press the **STR** button after each adjustment has been made to store the required values.
5. To exit the Service Mode, press the **"N"** button.

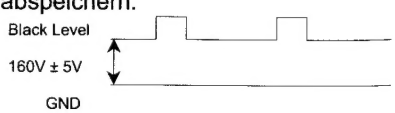
Alignment Function		Settings / Special features
Horizontal Position	H-Pos 061	Optimum setting.
Vertical Position	V-Pos 005	Optimum setting.
Horizontal Amplitude	H-Amp 055	Optimum setting.
Vert. Amplitude	V- Amp 054	Optimum setting.
EW-amplitude	EW-Amp1 - 030	Optimum setting.
Lower corner	Lower corner 007	Optimum setting.
Trapezium-comp	Trapez 1 047	Optimum setting.
Upper corner	Upper corner 006	Optimum setting.
Vertical Linearity	V-Lin 006	Optimum setting.
Vertical Symmetry	V-Sym 002	Optimum setting.
Angle	Angle 000	Optimum setting.
Bow	Bow 005	Optimum setting.
DVCO	DVCO - 005	Receive a PAL Colour Bar Pattern. For DVCO alignment press " Blue " button, wait until the colours are changing slowly and press " STR ".
Cut-off DC	Cut-off 0171	To adjust Cutoff connect an oscilloscope to the blue cathode, adjust "cutoff" value using the " Yellow " and " Blue " buttons until the black level is $160V \pm 5V$ press " STR " to store the value. Remove the oscilloscope. Select Ug2 adjustment and adjust the screen VR until the display shows "O.K."
Ug2 Test	Ug2 0155 O.K.	
Highlight Lowlight	High 0396 0357 0374 Low 0117 0132 0112	Optimum setting.
Sub-Brightness	Sub-Brightness 000	Optimum setting.



ABGLEICHTABELLE

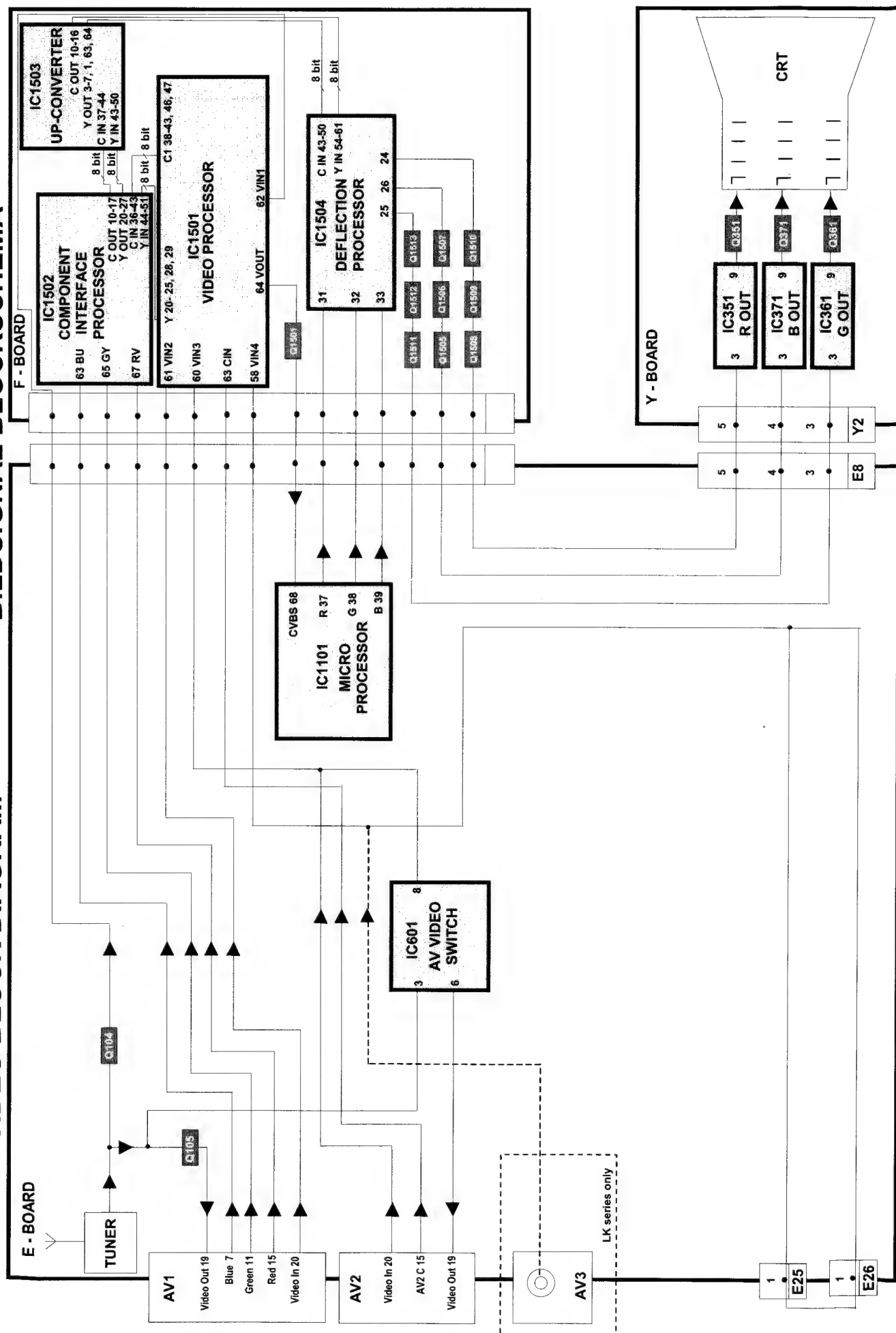
(Die angegebenen Werte sind Mittelwerte und Können individuell nach oben oder unten nach dem korrekten Abgleich abweichen.)

1. Um in den Service-Mode zu gelangen, gehen sie bitte wie folgt vor.
2. Stellen sie im Toneinstellungs-Menü die Bässe auf Maximun, die Höhen auf Minimum und die Lautstärke auf Minimum.
3. Halten sie die **INDEX**-Taste auf der Fernbedienung gedrückt und drücken zusätzlich die Taste **-V** im Bedienteil des TV-Gerätes. Auf dem Bildschirm erscheint die entsprechende Anzeige für den Service-Mode.
4. Die einzelnen Funktionen mit Hilfe der **ROTEN** und **GRÜNEN** Taste anwählen.
5. Mit der **GELBEN** und **BLAUEN** Taste die Werte der einzelnen Funktionen ändern.
6. Nach jeder Einstellung die Taste **STR** auf der Fernbedienung drücken, um die geänderten Werte abzuspeichern.
7. Zum Verlassen des Service-Modus die **"N"** - Taste auf der Fernbedienung drücken.

Abgleichfunktion		Einstellung / Besondere Merkmale
Horizontale position	H-Pos 061	Optimale Einstellung.
Vertikale Position	V-Pos 005	Optimale Einstellung.
Horizontale Amplitude	H-Amp 055	Optimale Einstellung.
Vertikale Amplitude	V-Amp 054	Optimale Einstellung.
OW-amplitude	EW-Amp1 - 030	Optimale Einstellung.
Lower corner	Lower corner 007	Optimale Einstellung.
Trapez-Kompensation	. Trapez 1 047	Optimale Einstellung.
Upper corner	Upper corner 006	Optimale Einstellung.
Vertikale linearität	V-Lin 006	Optimale Einstellung.
Vertikale Symmetrie	V-Sym 002	Optimale Einstellung.
Angle	Angle 000	Optimale Einstellung.
Bow	Bow 005	Optimale Einstellung.
DVCO	DVCO - 005	Ein Farbbalken-Testbild empfangen. Zum Abgleich des Farboszillators (DVCO) die blau Taste drücken. Nachdem ein leichtes Flackern in den Farbbalken zum Stillstand gekommen ist, die STR -Taste drücken.
Cut-off	Cut-off 0171	<p>Einen Oszillographen an die blaue Katode der Bildröhre anschliessen. STR-Taste drücken und Mit der gelben und blauen Taste den CUT-OFF Wert auf $160V \pm 5V$ abgleichen und mit der STR-Taste abspeichern. Den Oszillograph entfernen und den Ug2 Test aufrufen. Den Abgleichwert solange ändern, bis OK auf dem Bildschirm erscheint. Den Wert abspeichern.</p> 
Ug2 Test	Ug2 0155 O.K.	
Highlight Lowlight	High 0396 0357 0374 Low 0117 0132 0112	Optimale Einstellung.
Sub-Brightness	Sub-Brightness 000	Optimale Einstellung.

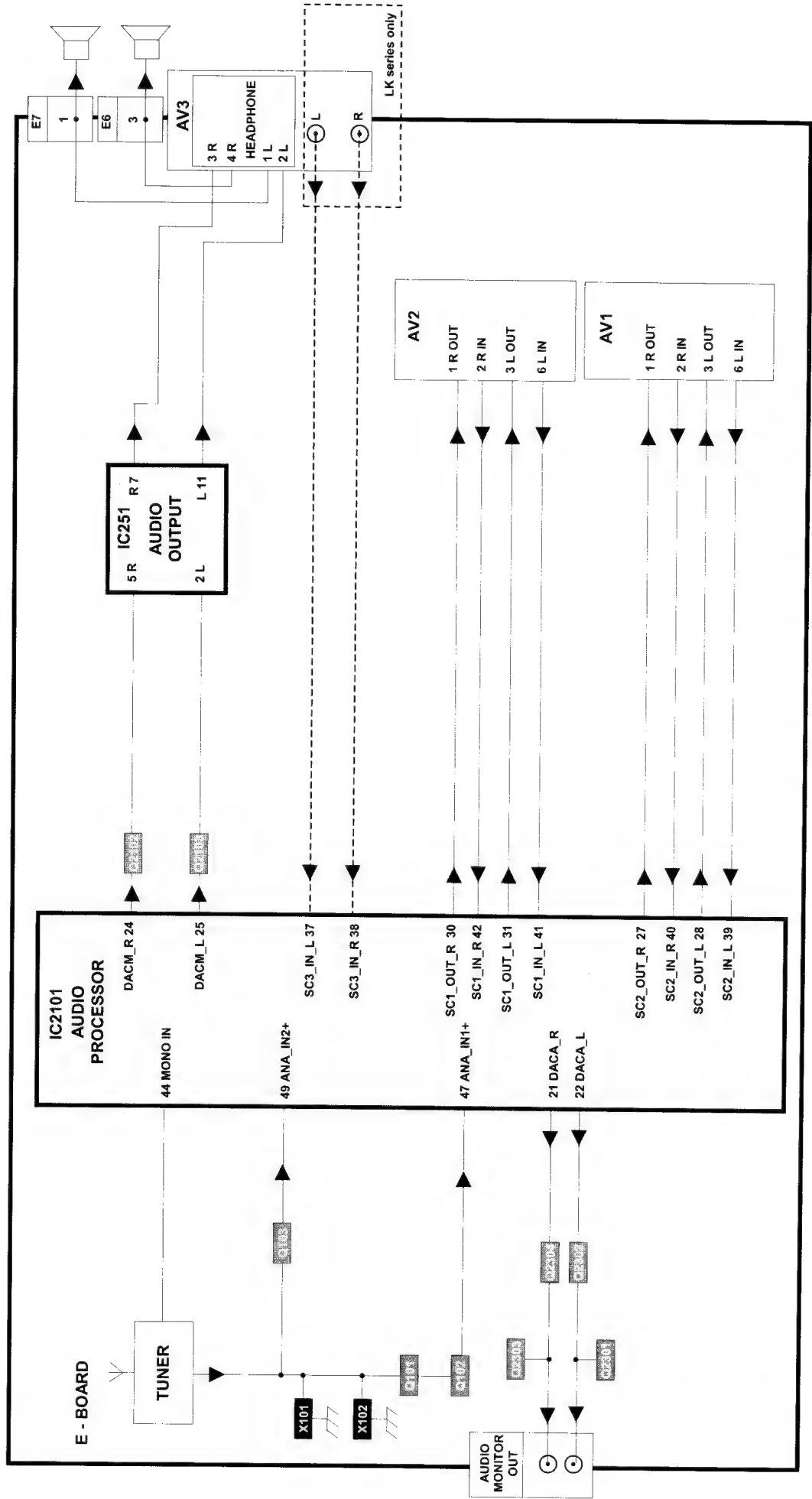
VIDEO BLOCK DIAGRAM

BILDSIGNAL BLOCKSCHEMA



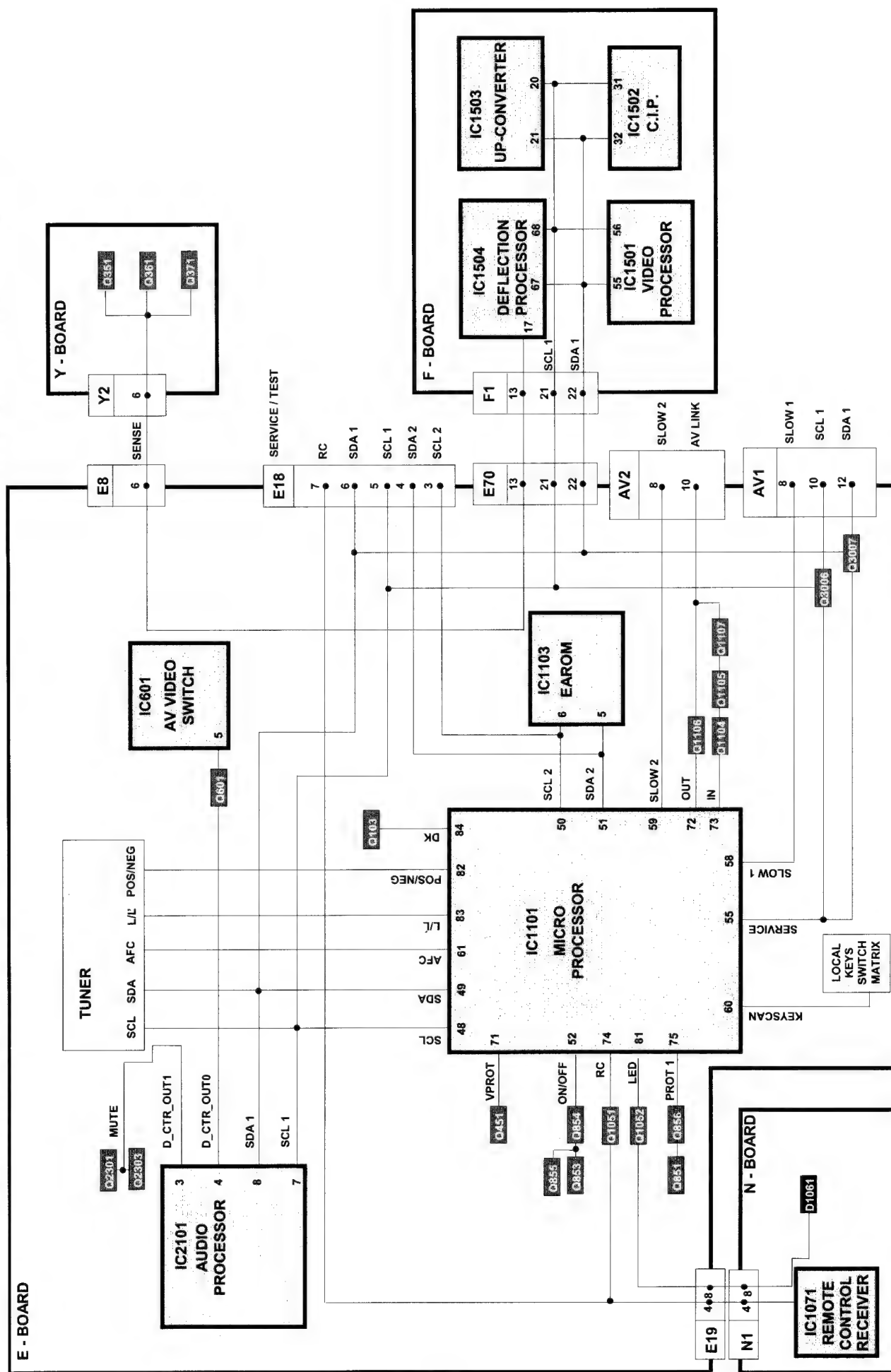
AUDIO BLOCK DIAGRAM

TONSIGNAL BLOCKSCHEMA



KONTROLL BLOCKSCHEMA

CONTROL BLOCK DIAGRAM



STROMVERSORGUNGS BLOCKSCHEMA



PARTS LOCATION

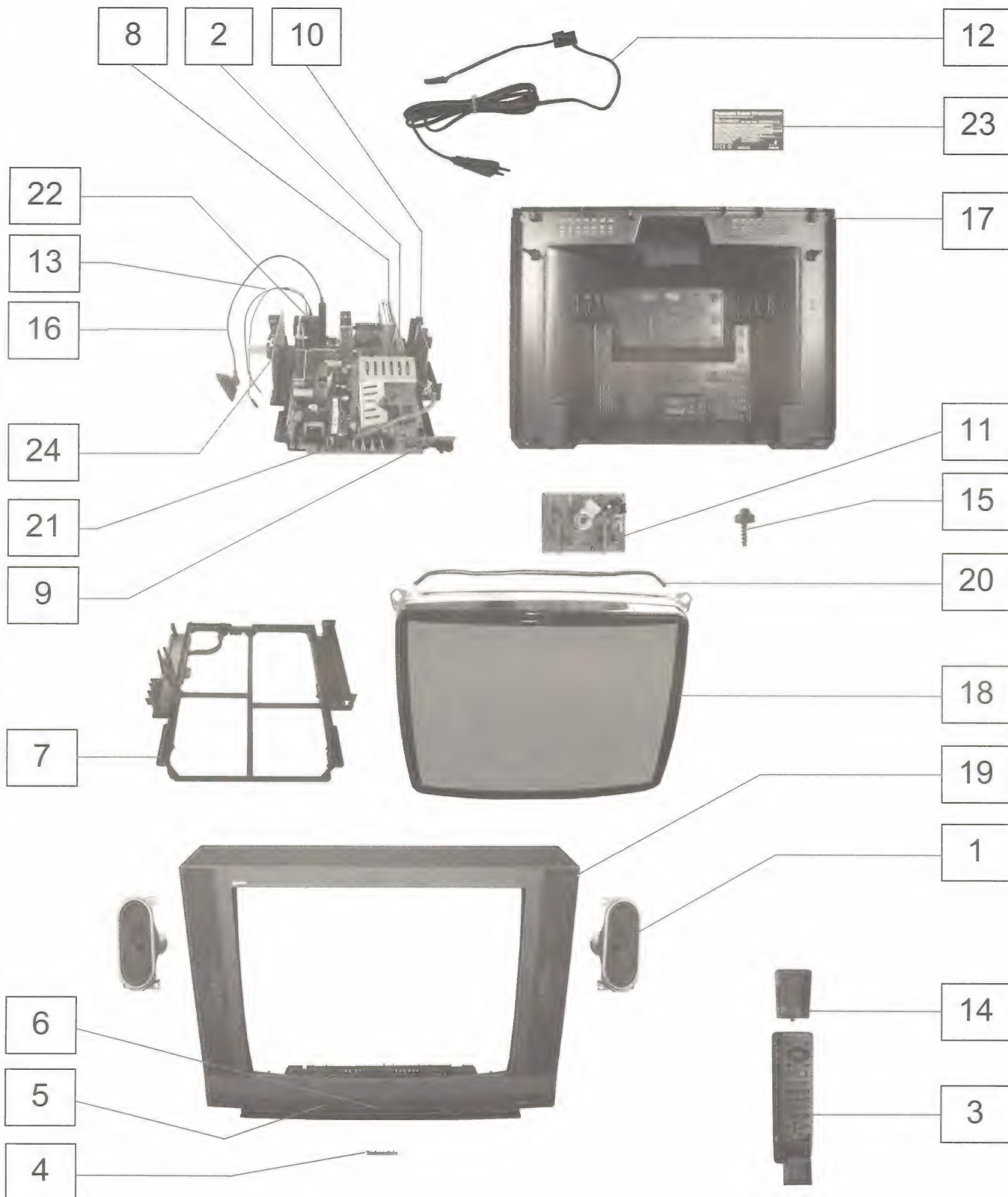
EXPLOSIONSZEICHNUNG

NOTE:

The numbers on the exploded view below refer to the exploded view section of the Replacement Parts List.


ANMERKUNG:

Die Nummern auf den Teilen der Explosionszeichnung zeigen die Bezugsnummern des Artikels der Explosionszeichnung der Ersatzteilliste an.



REPLACEMENT PARTS LIST


Important Safety Notice

Components Identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturers specified parts.

* In case of ordering these spare parts, please always add the complete Model-Type number to your order.

ERSATZTEILLISTE

Wichtiger Sicherheitshinweis

Teile, die mit einem Hinweis  gekennzeichnet sind wichtig für die Sicherheit. Sollte ein Auswechseln erforderlich sein, sind unbedingt Originalteile einzusetzen.

Bei der Bestellung von Ersatzteilen, die mit * gekennzeichnet sind, geben Sie bitte unbedingt die vollständige Typenbezeichnung mit an.

Cct Ref	Parts Number	Description
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COMMON PARTS

EXPLODED VIEW

1	EASG12D531R2	SPEAKER
2	ENG29505GR	TUNER
3	EUR511211	REMOTE CONTROL
4	TBM8E1928	PANASONIC BADGE
5	TBX8E083	POWER BUTTON
6	TKP8E1322	DOOR LID
7	TMX8E042-2	CHASSIS FRAME
8	TNP8EF007AD	F P.C.B.
9	TNP8EN016AF	N P.C.B.
10	TNP8EW002AB	W P.C.B.
11	TNP8EY018AG	Y P.C.B.
12	TXASX01CJNG1	POWER CORD
13	TXJ/FC0DEG	FOCUS LEAD ASSY
14	UR51EC904A	BATTERY COVER (REMOTE)
15	VP17005-32	CRT FIXING SCREW
16	ZTUZAE550A	ANODE LEAD

MISCELLANEOUS COMPONENTS

	TEK6940	LID CATCH
	TES8E015	POWER BUTTON SPRING
	TKP8E1321	LED WINDOW
	TMW8E027	LED HOLDER
	UM-3DJ-2P	BATTERY PACK
IC1101S	PLCC-84-T	84 PIN IC SOCKET
PCH2	TMX8E041	PCB BRACKET
PCH3	TMX8E041	PCB BRACKET

I.C.s

IC251	LA4282	AUDIO OUTPUT
IC351	TDA6101Q/N3	RGB OUTPUT
IC361	TDA6101Q/N3	RGB OUTPUT
IC371	TDA6101Q/N3	RGB OUTPUT
IC381	TL431CLPM	REGULATOR
IC601	TEA2114	VIDEO SWITCHING
IC701	TEA2031A	E/W CORRECTION
IC801	STRF6654LF57	POWER SUPPLY
IC850	SE140NLF4	ERROR IC
IC851	AN7812LB1	12V REGULATOR
IC852	AN78M09LB1	9V REGULATOR
IC853	AN78L08TA	8V REGULATOR
IC855	BA033T-M3	REGULATOR
IC856	AN7805LB	5V REGULATOR
IC1071	RPM6937-V4	LED RECEIVER
IC1101	SDA5450C59	MICRO PROCESSOR
IC1102	M27C200110F1	EPROM
IC1104	MN1381-R(TA)	RESET

Cct Ref	Parts Number	Description
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IC1105	MN1381-T(TA)	RESET
IC1501	VPC3215CB8TP	VIDEO PROCESSOR
IC1502	CIP3250APSB1	C.I.P.
IC1503	SDA9401	MICRO PROCESSOR
IC1504	DDP3310BPSE4	VIDEO PROCESSOR
IC2101	MSP3410DPOC5	AUDIO PROCESSOR

FUSES

F801	19181-3.15	FUSE
F801-1	EYF52BC	FUSE HOLDER
F801-2	EYF52BC	FUSE HOLDER

DIODES

D101	MA3020TX	DIODE
D102	MA3020TX	DIODE
D251	TYMD0002	DIODE
D253	MA700TA	DIODE
D254	MA700TA	DIODE
D351	ERA15-04V3	DIODE
D352	ERA15-04V3	DIODE
D361	ERA15-04V3	DIODE
D362	ERA15-04V3	DIODE
D371	ERA15-04V3	DIODE
D372	ERA15-04V3	DIODE
D376	1SS133T-77	DIODE
D377	1SS133T-77	DIODE
D378	1SS133T-77	DIODE
D387	MA2160LFS	DIODE
D453	1SS133T-77	DIODE
D454	EU02V0	DIODE
D457	1SS133T-77	DIODE
D501	1SS133T-77	DIODE
D502	1SR124-4AT82	DIODE
D511	MA4047MTA	DIODE
D553	1SR124-4AT82	DIODE
D554	1SR124-4AT82	DIODE
D556	1SS133T-77	DIODE
D557	TVSRU2AMLFA1	DIODE
D558	EU02V0	DIODE
D560	RH3GLF102	DIODE
D580	FMV-3GULF730	DIODE
D601	1SS133T-77	DIODE
D602	1SS133T-77	DIODE
D603	1SS133T-77	DIODE
D604	1SS133T-77	DIODE
D609	1SR124-4AT82	DIODE
D620	1SS133T-77	DIODE
D701	1SS133T-77	DIODE
D702	MTZJT-775.1C	DIODE
D704	MA29T-BTA	DIODE
D705	MTZJT776.2B	DIODE
D706	MA165TA5VT	DIODE
D707	AU02V0	DIODE
D708	1SS133T-77	DIODE

Cct Ref	Parts Number	Description
D709	MTZJT-778.2C	DIODE
D710	MTZJT-7716C	DIODE
D801	RBV-608LF-B	DIODE
D803	1SR124-4AT82	DIODE
D804	1SR124-4AT82	DIODE
D805	SFH617A-20P6	PHOTO COUPLER
D806	1SR124-4AT82	DIODE
D850	RU4BLF-L1	DIODE
D851	MTZJT776.2B	DIODE
D852	1SS133T-77	DIODE
D853	TYMD0002	DIODE
D854	S3L20U04P15	DIODE
D855	D10SC6MRL	DIODE
D856	RU4AMLF-M1	DIODE
D857	MTZJT-775.1A	DIODE
D858	1SS133T-77	DIODE
D859	1SS133T-77	DIODE
D860	1SS133T-77	DIODE
D861	1SS133T-77	DIODE
D862	MTZJT-7736A	DIODE
D863	1SS133T-77	DIODE
D864	1SS133T-77	DIODE
D865	1SS133T-77	DIODE
D866	1SS133T-77	DIODE
D867	EK06-V0	DIODE
D868	1N4150T-77	DIODE
D869	1N4150T-77	DIODE
D870	1SS133T-77	DIODE
D871	1N4150T-77	DIODE
D873	MTZJT-775.6C	DIODE
D874	1SR124-4AT82	DIODE
D875	BZX79A75A26A	DIODE
D890	1SS133T-77	DIODE
D891	1SS133T-77	DIODE
D901	1SS254T-77	DIODE
D902	1SS254T-77	DIODE
D903	1SS254T-77	DIODE
D907	1SS133T-77	DIODE
D910	R2KNLFA1	DIODE
D1071	SLR56UR3FS	LED
D1072	MTZJT-778.2C	DIODE
D1101	1SS133T-77	DIODE
D1131	MTZJT-775.6C	DIODE
D2101	MA723TA5	DIODE
D2102	MA723TA5	DIODE
D2103	MA723TA5	DIODE
D2104	MA723TA5	DIODE
D2105	MTZJT-778.2C	DIODE
D2303	MA723TA5	DIODE
D2304	MA723TA5	DIODE
D3351	1SS254T-77	DIODE
D3352	1SS133T-77	DIODE
D3353	1SS133T-77	DIODE
D3354	1SS133T-77	DIODE
R802	232266296706	THERMISTOR
TRANSISTORS		
Q101	BC847B	TRANSISTOR
Q102	BC847B	TRANSISTOR
Q103	BC847B	TRANSISTOR
Q104	BC847B	TRANSISTOR
Q105	BC847B	TRANSISTOR
Q251	2SD1328STX	TRANSISTOR
Q252	2SD1328STX	TRANSISTOR
Q253	BC847B	TRANSISTOR
Q254	BC847B	TRANSISTOR
Q351	TYMQ0002	TRANSISTOR

Cct Ref	Parts Number	Description
Q361	TYMQ0002	TRANSISTOR
Q371	TYMQ0002	TRANSISTOR
Q451	BC857B	TRANSISTOR
Q503	2SK2962TPE6	TRANSISTOR
Q551	2SC5144LB228	TRANSISTOR
Q552	2SC1473ATA	TRANSISTOR
Q601	BC847B	TRANSISTOR
Q701	BC857B	TRANSISTOR
Q702	BC847B	TRANSISTOR
Q703	IRF644R-M3S	TRANSISTOR
Q850	2SD2396K-M3	TRANSISTOR
Q851	BC857B	TRANSISTOR
Q852	2SD1858TV2	TRANSISTOR
Q853	BC847B	TRANSISTOR
Q854	BC847B	TRANSISTOR
Q855	BC847B	TRANSISTOR
Q856	BC847B	TRANSISTOR
Q857	2SA1018QTA	TRANSISTOR
Q905	BC847B	TRANSISTOR
Q906	BC847B	TRANSISTOR
Q907	BC857B	TRANSISTOR
Q908	2SA1535ARLB	TRANSISTOR
Q909	2SC3944ARLB	TRANSISTOR
Q1051	BC847B	TRANSISTOR
Q1052	BC847B	TRANSISTOR
Q1104	BC847B	TRANSISTOR
Q1105	BC847B	TRANSISTOR
Q1106	BC847B	TRANSISTOR
Q1107	BC847B	TRANSISTOR
Q1108	BC847B	TRANSISTOR
Q1501	BC847B	TRANSISTOR
Q1502	BC857B	TRANSISTOR
Q1503	BC847B	TRANSISTOR
Q1504	BC847B	TRANSISTOR
Q1505	BC857B	TRANSISTOR
Q1506	BC847B	TRANSISTOR
Q1507	BC847B	TRANSISTOR
Q1508	BC857B	TRANSISTOR
Q1509	BC847B	TRANSISTOR
Q1510	BC847B	TRANSISTOR
Q1511	BC857B	TRANSISTOR
Q1512	BC847B	TRANSISTOR
Q1513	BC847B	TRANSISTOR
Q1514	BC847B	TRANSISTOR
Q1515	BC847B	TRANSISTOR
Q2101	BC857B	TRANSISTOR
Q2102	BC857B	TRANSISTOR
Q2103	BC857B	TRANSISTOR
Q2301	BC847B	TRANSISTOR
Q2302	BC857B	TRANSISTOR
Q2303	BC847B	TRANSISTOR
Q2304	BC857B	TRANSISTOR
Q3006	BC847B	TRANSISTOR
Q3007	BC847B	TRANSISTOR
Q3352	BC857B	TRANSISTOR
TRANSFORMERS		
T501	ETH19Y193AY	TRANSFORMER
T801	ETS42AE296AD	TRANSFORMER
T802	ETP35KAN619U	TRANSFORMER
COILS		
J212	EXCELSA35V	COIL
L101	TLT100K991R	COIL
L102	TLT068K991R	COIL
L103	EXCELSA35B	COIL
L104	TLTACT4R7K	COIL
L105	TLTACTR47K	COIL

Cct Ref	Parts Number	Description
L106	TLTACT100K	COIL
L107	TLTACT6R8K	COIL
L114	ELJFC2R2KF	COIL
L115	ELJFC2R2KF	COIL
L301	TLTACT4R7K	COIL
L381	TLT220K991R	COIL
L382	ELESN6R8KA	COIL
L451	EXCELSA35T	COIL
L501	EXCELSA35T	COIL
L586	EXCELD35C	COIL
L606	ELESN100KA	COIL
L701	ELC18B271E	COIL
L704	ELC10D332E	COIL
L705	EXCELD35V	COIL
L850	EXCELSA35T	COIL
L851	EXCELSA35T	COIL
L852	ELEIE470KA	COIL
L855	EXCELSA35T	COIL
L856	EXCELSA39V	COIL
L910	EXCELSA35T	COIL
L911	EXCELSA35T	COIL
L912	EXCELSA35T	COIL
L1103	TLTACT100K	COIL
L1104	EXCELSA35T	COIL
L1105	ELJFC2R2KF	COIL
L1501	ELESN2R2KA	COIL
L1502	ELESN2R2KA	COIL
L1503	ELESN2R2KA	COIL
L1504	ELESN2R2KA	COIL
L1505	ELESN100KA	COIL
L1506	ELESN100KA	COIL
L1507	ELESNR22KA	COIL
L1508	ELESNR22KA	COIL
L1509	ELESN100KA	COIL
L1510	ELESN100KA	COIL
L1514	ELESN100KA	COIL
L1515	ELESNR39KA	COIL
L1516	ELESN4R7KA	COIL
L1517	ELESN4R7KA	COIL
L1518	ELESN4R7KA	COIL
L1519	ELESNR39KA	COIL
L1520	ELESN2R2KA	COIL
L1521	ELESN1R0KA	COIL
L1522	ELESN2R2KA	COIL
L1523	ELESN2R2KA	COIL
L1524	ELESN2R2KA	COIL
L1525	ELESN100KA	COIL
L1526	ELESN100KA	COIL
L1527	ELESN100KA	COIL
L1528	ELESN100KA	COIL
L1529	ELESN100KA	COIL
L2101	TLTACT100K	COIL
L2103	EXCELSA35T	COIL
L2104	TLTACT4R7K	COIL
L3001	ELEMV1R5MA	COIL
L3002	ELEMV1R5MA	COIL
L3003	ELEMV1R5MA	COIL
L3004	ELEMV1R5MA	COIL
FILTERS		
L802	ELF18N012A	LINE FILTER
L804	ELF18N012A	LINE FILTER
X101	EFCT6504BF	FILTER
X102	EFCT7004BN	CERAMIC FILTER
CRYSTALS		
X1101	AI060006AD	CRYSTAL
X1501	4730007267	CRYSTAL

Cct Ref	Parts Number	Description
X1502	4730007341	CRYSTAL
X2101	4730007158	CRYSTAL
RESISTORS		
C510	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA1	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA2	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA3	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA4	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA5	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA6	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA7	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA8	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA9	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA10	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA12	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA13	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA14	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA15	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA16	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA17	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA18	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA19	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA20	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA101	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA102	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA103	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA104	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA105	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA106	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA107	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA108	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA109	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA110	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA111	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA112	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA113	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA114	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA115	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA116	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA117	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA118	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA119	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JA201	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JA202	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE3	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE4	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE5	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE6	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE10	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE12	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE13	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE18	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE26	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE33	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE35	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE42	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE43	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
JSE45	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JSE46	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JSE47	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JSF1	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JSF2	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JSF3	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
JSY04	ERJ6GEY0R00	S.M.CARB 0.1W 5% 0 Ω
R101	ERJ6GEYJ331	S.M.CARB 0.1W 5% 330 Ω
R102	ERJ6GEYJ103	S.M.CARB 0.1W 5% 10K Ω

Cct Ref	Parts Number	Description			
R103	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R104	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω
R105	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R106	ERJ6GEYJ680	S.M.CARB	0.1W	5%	68 Ω
R107	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R108	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R109	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R110	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R111	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K Ω
R112	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R113	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R116	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 Ω
R117	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R118	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R121	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R251	ERJ6GEYJ121	S.M.CARB	0.1W	5%	120 Ω
R252	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7 Ω
R253	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R254	ERJ6GEYJ121	S.M.CARB	0.1W	5%	120 Ω
R255	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R256	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R257	ERJ6GEYJ270	S.M.CARB	0.1W	5%	27 Ω
R258	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7 Ω
R259	ERJ6GEYJ270	S.M.CARB	0.1W	5%	27 Ω
R260	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R261	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R262	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R263	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R264	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R265	ERDS2TJ2R2T	CARBON	0.25W	5%	2R2 Ω
R266	ERDS2TJ2R2T	CARBON	0.25W	5%	2R2 Ω
R267	ERF7ZK4R7	WOUND	7W	10%	4R7 Ω
R268	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R269	ERQ14AJ101P	METAL	0.25W	5%	100 Ω
R271	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R272	ERF7ZK4R7	WOUND	7W	10%	4R7 Ω
R350	ERQ12AJ151P	FUSIBLE	0.5W	5%	150 Ω
R352	ERJ6GEYJ202	S.M.CARB	0.1W	5%	2K Ω
R355	ERG1ANJP683H	METAL	0.5W	5%	68K Ω
R356	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R358	ERDS1TJ821T	CARBON	0.5W	5%	820 Ω
R360	ERO50PKF8251	METAL	0.5W	5%	8M2 Ω
R362	ERJ6GEYJ202	S.M.CARB	0.1W	5%	2K Ω
R365	ERG1ANJP683H	METAL	0.5W	5%	68K Ω
R366	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R368	ERDS1TJ821T	CARBON	0.5W	5%	820 Ω
R372	ERJ6GEYJ202	S.M.CARB	0.1W	5%	2K Ω
R375	ERG1ANJP683H	METAL	0.5W	5%	68K Ω
R376	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R378	ERDS1TJ821T	CARBON	0.5W	5%	820 Ω
R382	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R383	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R385	ERQ12HJ1R2P	METAL	0.5W	5%	1R2 Ω
R394	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820 Ω
R396	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820 Ω
R398	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820 Ω
R451	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R452	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R453	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R454	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K Ω
R455	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R456	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R457	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R458	ERDS1TJ1R0T	CARBON	0.5W	5%	1 Ω
R459	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R461	ERX2SJS1R2H	FUSIBLE	2W	5%	1R2 Ω

Cct Ref	Parts Number	Description			
R463	ERDS2TJ222T	CARBON	0.5W	5%	2K2 Ω
R464	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8 Ω
R467	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R502	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R503	ERJ6GEYJ105	S.M.CARB	0.1W	5%	1M Ω
R507	ERG2ANJP330H	METAL	2W	5%	33 Ω
R509	ERG1SJ222E	METAL	0.5W	5%	2K2 Ω
R510	ERG1SJ222E	METAL	0.5W	5%	2K2 Ω
R551	ERX3SJSR33H	METAL	3W	5%	R33 Ω
R558	ERDS1TJ124T	CARBON	0.5W	5%	120K Ω
R560	ERJ6GEYJ274	S.M.CARB	0.1W	5%	270K Ω
R561	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R563	ERJ6GEYJ824	S.M.CARB	0.1W	5%	820K Ω
R564	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω
R566	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω
R567	ERF7ZK1R0	WOUND	7W	10%	1 Ω
R568	ERDS1TJ120T	CARBON	0.5W	5%	12 Ω
R581	ERQ2CJP821S	METAL	2W	5%	820 Ω
R582	ERG3FJ471H	METAL	3W	5%	470 Ω
R583	ERG3FJ331H	METAL	3W	5%	330 Ω
R603	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R604	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R605	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R606	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R607	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R608	ERJ6GEYJ201	S.M.CARB	0.1W	5%	200 Ω
R609	ERJ6GEYJ201	S.M.CARB	0.1W	5%	200 Ω
R610	ERJ6GEYJ242	S.M.CARB	0.1W	5%	2K4 Ω
R611	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R612	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R620	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R622	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R647	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R648	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
R650	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R701	ERQ12AJ330P	METAL	0.5W	5%	330 Ω
R702	ERX2SJS2R7H	FUSIBLE	2W	5%	2R7 Ω
R703	ERG2FJ821H	METAL	2W	5%	820 Ω
R704	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω
R705	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R706	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R707	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω
R708	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K Ω
R709	ERJ6GEYJ393	S.M.CARB	0.1W	5%	39K Ω
R710	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω
R711	ERG1SJ101E	METAL	1W	5%	100 Ω
R712	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R714	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R715	ERDS2TJ272T	CARBON	0.25W	5%	2K7 Ω
R716	ERQ12AJ680P	METAL	0.5W	5%	68 Ω
R718	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R719	ERJ6GEYJ224	S.M.CARB	0.1W	5%	220K Ω
R720	ERJ6GEYJ105	S.M.CARB	0.1W	5%	1M Ω
R721	ERJ6GEYJ563	S.M.CARB	0.1W	5%	56K Ω
R801	ERC12ZGK335V	SOLID	0.5W	10%	3M3 Ω
R805	ERD25TJ473T	CARBON	0.25W	5%	47K Ω
R806	ERD25TJ100T	CARBON	0.25W	5%	10 Ω
R807	ERD25TJ332T	CARBON	0.25W	5%	3K3 Ω
R809	ERD25TJ681T	CARBON	0.25W	5%	680 Ω
R810	ERW2PKR27P	WOUND	2W	10%	R27 Ω
R811	ERW2PKR27P	WOUND	2W	10%	R27 Ω
R812	ERD75TAJ825	CARBON	0.75W	5%	8M2 Ω
R813	ERF7ZK2R7	WOUND	7W	20%	2R7 Ω
R814	ERD25TJ473T	CARBON	0.25W	5%	47K Ω
R815	ERD25TJ222T	CARBON	0.25W	5%	2K2 Ω
R850	ERD25TJ122T	CARBON	0.25W	5%	1K2 Ω

Cct Ref	Parts Number	Description			
R852	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R853	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R854	ERG2FJ223H	METAL	2W	5%	22K Ω
R855	ERJ6GEYJ752	S.M.CARB	0.1W	5%	7K5 Ω
R856	ERJ6GEYJ752	S.M.CARB	0.1W	5%	7K5 Ω
R857	ERJ6GEYJ752	S.M.CARB	0.1W	5%	7K5 Ω
R858	ERJ6GEYJ752	S.M.CARB	0.1W	5%	7K5 Ω
R859	ERJ6GEYJ753	S.M.CARB	0.1W	5%	75K Ω
R861	ERDS2TJ221T	CARBON	0.5W	5%	220 Ω
R862	ERDS2TJ272T	CARBON	0.25W	5%	2K7 Ω
R863	ERDS1TJ560T	CARBON	0.5W	5%	56 Ω
R864	ERDS1TJ151T	CARBON	0.5W	5%	150 Ω
R865	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R867	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R868	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R869	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R870	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7 Ω
R871	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω
R872	ERG1SJ183P	METAL	1W	5%	18K Ω
R873	ERG1SJ223P	METAL	1W	5%	22K Ω
R874	ERDS2TJ104T	CARBON	2W	5%	100K Ω
R876	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R877	ERW2PKR47P	WOUND	2W	10%	R47 Ω
R878	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R879	ERG3FJ680H	METAL	3W	5%	68 Ω
R880	ERG5FJ120H	METAL	5W	5%	12 Ω
R882	ERG2FJ330H	METAL	2W	5%	33 Ω
R890	ERX1FJ3R9P	FUSIBLE	1W	5%	3R9 Ω
R913	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18K Ω
R914	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
R915	ERJ6GEYJ821	S.M.CARB	0.1W	5%	820 Ω
R916	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 Ω
R917	ERJ6GEYJ121	S.M.CARB	0.1W	5%	120 Ω
R918	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R919	ERQ14AJW390E	FUSIBLE	0.25W	5%	39 Ω
R920	ERQ14AJW390E	FUSIBLE	0.25W	5%	39 Ω
R922	ERDS2TJ683T	CARBON	2W	5%	68K Ω
R923	ERDS2TJ683T	CARBON	2W	5%	68K Ω
R924	ERDS1FYJ390T	CARBON	0.5W	5%	39 Ω
R925	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R926	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R927	ERDS2TJ122T	CARBON	0.25W	5%	1K2 Ω
R928	ERDS2TJ5R6T	CARBON	0.25W	5%	5R6 Ω
R929	ERDS1FVJ471T	CARBON	0.5W	5%	470 Ω
R931	ERDS1FYJ390T	CARBON	0.5W	5%	39 Ω
R935	ERQ14AJW3R9E	FUSIBLE	0.25W	5%	3R9 Ω
R936	ERQ1CJP102S	FUSIBLE	1W	5%	1K Ω
R937	ERQ14AJW100E	FUSIBLE	0.25W	5%	10 Ω
R938	ERDS2TJ122T	CARBON	0.25W	5%	1K2 Ω
R941	ERDS2TJ5R6T	CARBON	0.25W	5%	5R6 Ω
R1051	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R1052	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R1053	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1054	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R1071	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1101	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1102	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R1103	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω
R1104	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω
R1105	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1106	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R1107	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R1108	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R1109	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R1110	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R1111	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω

Cct Ref	Parts Number	Description			
R1112	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R1113	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1115	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R1116	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1117	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1118	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R1119	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R1120	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1121	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1123	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1124	ERJ6GEYJ1R0	S.M.CARB	0.1W	5%	1 Ω
R1125	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R1126	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1127	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1128	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8 Ω
R1129	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8 Ω
R1130	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1131	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1132	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1133	ERJ6GEYJ272	S.M.CARB	0.1W	5%	2K7 Ω
R1136	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω
R1137	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R1138	ERJ6GEYJ105	S.M.CARB	0.1W	5%	1M Ω
R1139	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R1140	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R1141	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R1142	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R1145	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1146	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1147	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1148	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1149	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R1151	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1152	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1154	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1155	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1156	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1157	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1158	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1159	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R1160	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R1161	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1162	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R1163	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R1164	ERJ6GEYJ332	S.M.CARB	0.1W	5%	3K3 Ω
R1165	ERJ6GEYJ512	S.M.CARB	0.1W	5%	5K1 Ω
R1166	ERJ6GEYJ912	S.M.CARB	0.1W	5%	9K1 Ω
R1167	ERJ6GEYJ100	S.M.CARB	0.1W	5%	10 Ω
R1168	ERJ6GEYJ473	S.M.CARB	0.1W	5%	47K Ω
R1169	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R1170	ERJ6GEYJ273	S.M.CARB	0.1W	5%	27K Ω
R1171	ERJ6GEYJ224	S.M.CARB	0.1W	5%	220K Ω
R1172	ERJ6GEYJ223	S.M.CARB	0.1W	5%	22K Ω
R1173	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R1174	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 Ω
R1175	ERJ6GEYJ225	S.M.CARB	0.1W	5%	2M2 Ω
R1178	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R1501	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1502	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1504	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1505	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1506	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1507	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1508	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1509	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1510	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω

Cct Ref	Parts Number	Description			
R1511	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1512	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1513	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R1514	ERJ6GEYJ472	S.M.CARB	0.1W	5%	4K7 Ω
R1515	ERJ6GEYJ752	S.M.CARB	0.1W	5%	7K5 Ω
R1517	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R1521	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1522	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω
R1523	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω
R1524	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R1525	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1526	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω
R1527	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2 Ω
R1528	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R1529	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2 Ω
R1530	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1531	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R1532	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω
R1533	ERJ6GEYJ122	S.M.CARB	0.1W	5%	1K2 Ω
R1534	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R1535	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R1536	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω
R1537	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8 Ω
R1538	ERJ6GEYJ331	S.M.CARB	0.1W	5%	330 Ω
R1539	ERJ6GEYJ271	S.M.CARB	0.1W	5%	270 Ω
R1540	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8 Ω
R1541	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1542	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R1543	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1544	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1545	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1546	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R1547	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1548	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1549	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1550	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1551	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1552	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1553	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1554	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1555	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1556	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1557	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1558	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1559	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1560	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1561	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1562	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1563	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1564	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1565	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1566	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1567	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1568	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1569	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1570	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1571	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1572	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1573	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1574	ERJ6GEYJ682	S.M.CARB	0.1W	5%	6K8 Ω
R1575	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R1577	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1578	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R1579	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1580	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R1584	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω

Cct Ref	Parts Number	Description			
R1585	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R1586	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R1587	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5 Ω
R1588	ERJ6GEYJ511	S.M.CARB	0.1W	5%	510 Ω
R1589	ERJ6GEYJ152	S.M.CARB	0.1W	5%	1K5 Ω
R2101	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2102	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2103	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2109	ERJ6GEYJ183	S.M.CARB	0.1W	5%	18K Ω
R2110	ERJ6GEY0R00	S.M.CARB	0.1W	5%	0 Ω
R2111	ERJ6GEYJ221	S.M.CARB	0.1W	5%	220 Ω
R2112	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R2113	ERJ6GEYJ562	S.M.CARB	0.1W	5%	5K6 Ω
R2114	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2115	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2 Ω
R2116	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2117	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2118	ERJ6GEYJ822	S.M.CARB	0.1W	5%	8K2 Ω
R2119	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2120	ERJ6GEYJ222	S.M.CARB	0.1W	5%	2K2 Ω
R2302	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R2303	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2304	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R2305	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R2306	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R2308	ERJ6GEYJ104	S.M.CARB	0.1W	5%	100K Ω
R2309	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R2310	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R2311	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R2312	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3001	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3002	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R3003	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3004	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω
R3005	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3006	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R3007	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3008	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω
R3010	ERDS2TJ750T	CARBON	0.25W	5%	75 Ω
R3013	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3014	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R3015	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3016	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω
R3017	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3018	ERJ6GEYJ471	S.M.CARB	0.1W	5%	470 Ω
R3019	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3020	ERJ6GEYJ153	S.M.CARB	0.1W	5%	15K Ω
R3021	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R3046	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3047	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3048	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3049	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3050	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3057	ERJ6GEYJ750	S.M.CARB	0.1W	5%	75 Ω
R3101	ERDS1TJ151T	CARBON	0.5W	5%	150 Ω
R3102	ERDS1TJ151T	CARBON	0.5W	5%	150 Ω
R3103	ERG2FJ221H	METAL	2W	5%	220 Ω
R3104	ERG2FJ221H	METAL	2W	5%	220 Ω
R3354	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R3355	ERJ6GEYJ391	S.M.CARB	0.1W	5%	390 Ω
R3356	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680 Ω
R3357	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680 Ω
R3358	ERJ6GEYJ681	S.M.CARB	0.1W	5%	680 Ω
R3360	ERDS1TJ471T	CARBON	0.5W	5%	470 Ω
R3361	ERO50PKF1133	METAL	0.5W	5%	110K Ω
R3362	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω

Cct Ref	Parts Number	Description			
R3363	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3364	ERJ6GEYJ103	S.M.CARB	0.1W	5%	10K Ω
R3601	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3602	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω
R3603	ERJ6GEYJ101	S.M.CARB	0.1W	5%	100 Ω

CAPACITORS

C101	ECJ2VB1C104K	ELECT	350V	100nF
C102	ECJ2VB1C104K	ELECT	350V	100nF
C103	ECJ2VF1H104Z	ELECT	350V	100nF
C105	ECUV1H560JCX	S.M. CAP	50V	56pF
C106	ECUV1H560JCX	S.M. CAP	50V	56pF
C107	ECJ2VF1H104Z	ELECT	350V	100nF
C108	ECA1CM470B	ELECT	16V	47μF
C109	ECUV1H102JCX	S.M. CAP	50V	1nF
C110	ECJ2VF1H103Z	ELECT	350V	10nF
C111	ECA1HMR33B	ELECT	50V	330nF
C114	ECJ2VF1H104Z	ELECT	350V	100nF
C115	ECJ2VF1H103Z	ELECT	350V	10nF
C116	ECA1CM221B	ELECT	16V	220μF
C117	ECJ2VF1H103Z	ELECT	350V	10nF
C118	ECJ2VF1H104Z	ELECT	350V	100nF
C119	ECA1CM221B	ELECT	16V	220μF
C120	ECA1CM221B	ELECT	16V	220μF
C121	ECJ2VB1H103K	ELECT	350V	10nF
C124	ECUV1H220JCX	S.M. CAP	50V	22pF
C125	ECUV1H100DCX	S.M. CAP	50V	10pF
C133	ECJ2YB1H104K	ELECT	350V	100nF
C134	ECJ2YB1H104K	ELECT	350V	100nF
C135	ECUV1H104KBW	S.M. CAP	50V	100nF
C136	ECJ2YB1H104K	ELECT	350V	100nF
C138	ECJ2YB1H104K	ELECT	350V	100nF
C251	ECA1EM470B	ELECT	25V	47μF
C252	ECJ2VB1H103K	ELECT	350V	10nF
C253	ECA1HM4R7B	ELECT	50V	4.7μF
C254	ECQV1H684JL3	FILM	50V	680nF
C255	ECA1EM101B	ELECT	25V	100μF
C256	ECJ2VB1H103K	ELECT	350V	10nF
C257	ECA1HM4R7B	ELECT	50V	4.7μF
C258	ECA1EM470B	ELECT	25V	47μF
C259	ECQV1H684JL3	FILM	50V	680nF
C260	ECA1VM102B	ELECT	35V	1000μF
C261	ECA1VM102B	ELECT	35V	1000μF
C262	ECQV1H274JL3	FILM	50V	270nF
C263	ECA1HM010B	ELECT	50V	1μF
C264	ECA1HHG222E	ELECT	50V	2200μF
C265	ECQV1H274JL3	FILM	50V	270nF
C266	ECA1HM010B	ELECT	50V	1μF
C267	ECJ2YB1H104K	ELECT	350V	100nF
C268	ECJ2YB1H104K	ELECT	350V	100nF
C270	ECJ2YB1H104K	ELECT	350V	100nF
C350	ECUV1H102JCX	S.M. CAP	50V	1nF
C352	ECJ2VF1H224Z	ELECT	350V	220nF
C353	ECJ2YB1H104K	ELECT	350V	100nF
C354	ECQE2104KF3	FILM	250V	100nF
C355	ECKR2H102KB5	CERAMIC	500V	1nF
C358	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C360	ECUV1H102JCX	S.M. CAP	50V	1nF
C362	ECJ2VF1H224Z	ELECT	350V	220nF
C363	ECJ2YB1H104K	ELECT	350V	100nF
C364	ECQE2104KF3	FILM	250V	100nF
C365	ECKR2H102KB5	CERAMIC	500V	1nF
C368	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C369	ECUV1H220JCX	S.M. CAP	50V	22pF
C370	ECUV1H102JCX	S.M. CAP	50V	1nF
C372	ECJ2VF1H224Z	ELECT	350V	220nF
C373	ECJ2YB1H104K	ELECT	350V	100nF

C374	ECQE2104KF3	FILM	250V	100nF
C375	ECKR2H102KB5	CERAMIC	500V	1nF
C378	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C381	ECA1CM101B	ELECT	16V	100μF
C382	ECA1CM471B	ELECT	16V	470μF
C383	ECJ2VB1H103K	ELECT	350V	10nF
C384	ECQE2104KFW	FILM	250V	100nF
C385	ECA2EM220B	ELECT	250V	22μF
C386	ECKW3D152JBN	CERAMIC	2kV	1.5nF
C451	ECUV1H102JX	S.M. CAP	50V	1nF
C453	ECUV1H152KBX	S.M. CAP	50V	1.5pF
C454	ECQV1H105JL3	FILM	50V	1μF
C455	ECA1HM100B	ELECT	50V	10μF
C456	ECA1HHG221B	ELECT	50V	220μF
C459	ECQB1224KFW	FILM	100V	220nF
C508	ECQB1H103KF3	FILM	50V	10nF
C509	ECA1VM470B	ELECT	35V	47μF
C511	ECQE2683KFW	FILM	100V	68nF
C552	ECWH15H102JN	FILM	1500V	1nF
C557	ECKR2H471KB5	CERAMIC	500V	470pF
C558	ECA1HHG471E	ELECT	50V	470μF
C561	ECA1EHG102B	ELECT	25V	1000μF
C562	ECKR2H101KB5	CERAMIC	500V	100pF
C563	ECA2EHG220B	ELECT	250V	20μF
C564	ECEA2AU2R2B	ELECT	100V	2.2μF
C565	ECQP1H273JZW	FILM	100V	27nF
C566	ECKR2H471KB5	CERAMIC	500V	470pF
C567	ECA1EHG102B	ELECT	25V	1000μF
C568	ECKR2H471KB5	CERAMIC	500V	470pF
C569	ECKR2H102KB5	CERAMIC	500V	1nF
C583	ECWH20562JVB	FILM	200V	5.6nF
C587	ECQF4223JZH	FILM	400V	22nF
C608	ECJ2VB1H103K	ELECT	350V	10nF
C609	ECUV1H270JCX	S.M. CAP	50V	27pF
C623	ECUV1H121JCX	S.M. CAP	50V	120pF
C624	ECUV1H121JCX	S.M. CAP	50V	120pF
C625	ECQV1H224JL3	FILM	50V	220nF
C626	ECA1CM100B	ELECT	16V	10μF
C627	ECJ2VB1C104K	ELECT	350V	100nF
C628	ECQV1H224JL3	FILM	50V	220nF
C701	ECA1HHG101B	ELECT	50V	100μF
C702	ECJ2VB1H103K	ELECT	350V	10nF
C703	ECA1HHG100E	ELECT	50V	10μF
C704	ECJ2VB1H223K	ELECT	350V	22nF
C705	ECQB1H102KF3	ELECT	50V	1nF
C709	ECQV1H105JL3	FILM	50V	1μF
C801	ECQE2A474MWB	FILM	250V	470nF
C804	222233510224	FILM	250V	220nF
C806	ECKWNA101MB	CERAMIC	400V	100μF
C807	ECKW2H472PU7	CERAMIC	500V	4.7nF
C808	ECKW2H472PU7	CERAMIC	500V	4.7nF
C809	ECKW2H472PU7	CERAMIC	500V	4.7nF
C810	ECKW2H472PU7	CERAMIC	500V	4.7nF
C811	222215946221	ELECT	400V	220μF
C814	ECKW3D102KBP	CERAMIC	2kV	1nF
C815	ECKR1H471KB5	CERAMIC	50V	470pF
C816	ECA1EM101B	ELECT	25V	100μF
C817	ECQE6104KFW	FILM	600V	100nF
C818	ECKCWS332MEB	CERAMIC	1.2kV	3.3nF
C819	ECQB1H152KF3	FILM	50V	1.5nF
C820	ECJ2VF1H104Z	ELECT	350V	100nF
C839	ECA1CM100B	ELECT	16V	10μF
C840	ECJ2YB1H104K	ELECT	350V	100nF
C841	ECA1AM222B	ELECT	10V	2200μF
C842	ECA1CM100B	ELECT	16V	10μF
C850	ECKW3D471GBP	CERAMIC	2kV	470pF

Cct Ref	Parts Number	Description		
C851	ECA2CHG221E	ELECT	160V	220µF
C852	ECA2CHG101E	ELECT	160V	100µF
C853	ECKR2H471KB5	CERAMIC	500V	470pF
C854	ECA1EM102B	ELECT	25V	1000µF
C855	ECKR2H471KB5	CERAMIC	500V	470pF
C856	ECA1AHG332B	ELECT	10V	3.3nF
C857	ECKR2H471KB5	CERAMIC	500V	470pF
C858	ECEA1HGE102E	ELECT	50V	1000µF
C859	ECJ2VF1H104Z	ELECT	350V	100nF
C860	ECA1CM101B	ELECT	16V	100µF
C862	ECJ2VF1H104Z	ELECT	350V	100nF
C863	ECA1CM101B	ELECT	16V	100µF
C864	ECJ2VF1H104Z	ELECT	350V	100nF
C865	ECA1CM100B	ELECT	16V	10µF
C866	ECJ2VF1H104Z	ELECT	350V	100nF
C867	ECA1CM100B	ELECT	16V	10µF
C868	ECA1CM100B	ELECT	16V	10µF
C869	ECA1EM101B	ELECT	25V	100µF
C870	ECA1EM471B	ELECT	25V	470µF
C871	ECA1CM332E	ELECT	16V	3300µF
C872	ECA1CM471B	ELECT	16V	470µF
C873	ECA1CM100B	ELECT	16V	10µF
C875	ECA2CM4R7B	ELECT	160V	10µF
C876	ECA1HHG101B	ELECT	50V	100µF
C902	ECA1VM101B	ELECT	35V	100µF
C904	ECJ2VF1H103Z	ELECT	350V	10nF
C906	ECUV1H563KBX	S.M. CAP	50V	56nF
C907	ECUV1H331JCX	S.M. CAP	50V	330pF
C909	ECKR2H472MD5	CERAMIC	500V	4.7nF
C910	ECKR2H472MD5	CERAMIC	500V	4.7nF
C912	ECA2EM220B	ELECT	250V	22µF
C913	ECA1CM101B	ELECT	16V	100µF
C914	ECA1CM101B	ELECT	16V	100µF
C916	ECA2EM220B	ELECT	250V	22µF
C917	ECA1HM100B	ELECT	50V	10µF
C918	ECJ2VF1H103Z	ELECT	350V	10nF
C919	ECCR2H270JC5	CERAMIC	500V	27pF
C1071	ECUV1H331JCX	S.M. CAP	50V	330pF
C1072	ECJ2VB1H103K	ELECT	350V	10nF
C1073	ECA1CM101E	ELECT	16V	100µF
C1101	ECJ2VF1H104Z	ELECT	350V	100nF
C1102	ECA0JM101B	ELECT	400V	100µF
C1103	ECUV1H220JCX	S.M. CAP	50V	22pF
C1104	ECUV1H220JCX	S.M. CAP	50V	22pF
C1105	ECUV1H101JCX	S.M. CAP	50V	100pF
C1108	ECJ2VB1H333K	ELECT	350V	33nF
C1111	ECA1CM100B	ELECT	16V	10µF
C1112	ECJ2VB1H103K	ELECT	350V	10nF
C1115	ECJ3VB1C474K	ELECT	3.5KV	470nF
C1116	ECJ2VB1H472K	ELECT	350V	4.7nF
C1117	ECJ2VF1H104Z	ELECT	350V	100nF
C1118	ECJ2VB1H103K	ELECT	350V	10nF
C1119	ECUV1H221JCX	S.M. CAP	50V	220pF
C1120	ECJ2VF1H104Z	ELECT	350V	100nF
C1121	ECUV1H221JCX	S.M. CAP	50V	220pF
C1123	ECUV1H471JCX	S.M. CAP	50V	470pF
C1124	ECUV1H221JCX	S.M. CAP	50V	220pF
C1125	ECUV1H221JCX	S.M. CAP	50V	220pF
C1126	ECUV1H221JCX	S.M. CAP	50V	220pF
C1127	ECUV1H561JCX	S.M. CAP	50V	560pF
C1129	ECUV1H270JCX	S.M. CAP	50V	27pF
C1130	ECA1CM221B	ELECT	16V	220µF
C1501	ECUV1H271JCX	S.M. CAP	50V	270pF
C1502	ECUV1H271JCX	S.M. CAP	50V	270pF
C1503	ECUV1H271JCX	S.M. CAP	50V	270pF
C1504	ECUV1H271JCX	S.M. CAP	50V	270pF

Cct Ref	Parts Number	Description		
C1505	ECUV1H271JCX	S.M. CAP	50V	270pF
C1506	ECUV1H271JCX	S.M. CAP	50V	270pF
C1507	ECUV1H271JCX	S.M. CAP	50V	270pF
C1508	ECUV1H271JCX	S.M. CAP	50V	270pF
C1509	ECQV1H684JL3	FILM	50V	680nF
C1510	ECQV1H684JL3	FILM	50V	680nF
C1511	ECQV1H684JL3	FILM	50V	680nF
C1512	ECQV1H684JL3	FILM	50V	680nF
C1513	ECUV1H102JCX	S.M. CAP	50V	1nF
C1514	ECEA1CKA100B	ELECT	16V	10µF
C1515	ECJ2VB1H103K	ELECT	350V	10nF
C1516	ECEA1CKA101B	ELECT	16V	100µF
C1517	ECJ2YB1H473K	ELECT	350V	47nF
C1518	ECEA1CKA100B	ELECT	16V	10µF
C1519	ECUV1H050CCX	S.M. CAP	50V	50pF
C1520	ECUV1H050CCX	S.M. CAP	50V	50pF
C1521	ECJ2VB1H103K	ELECT	350V	10nF
C1522	ECEA1CKA100B	ELECT	16V	10µF
C1523	ECJ2VB1H103K	ELECT	350V	10nF
C1524	ECEA1CKA100B	ELECT	16V	10µF
C1525	ECJ2VB1H103K	ELECT	350V	10nF
C1526	ECEA1CKA100B	ELECT	16V	10µF
C1527	ECJ2VB1C104K	ELECT	350V	100nF
C1528	ECEA1CKA100B	ELECT	16V	10µF
C1529	ECJ2VB1C104K	ELECT	350V	100nF
C1530	ECEA1CKA100B	ELECT	16V	10µF
C1531	ECJ2VB1C104K	ELECT	350V	100nF
C1532	ECEA1CKA100B	ELECT	16V	10µF
C1540	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C1541	ECJ2VB1H333K	ELECT	350V	33nF
C1542	ECJ2VB1H333K	ELECT	350V	33nF
C1543	ECJ2VB1C224K	ELECT	350V	220nF
C1544	ECJ2VB1H333K	ELECT	350V	33nF
C1545	ECEA1CKA100B	ELECT	16V	10µF
C1546	ECEA1CKA100B	ELECT	16V	10µF
C1547	ECJ2VB1H103K	ELECT	350V	10nF
C1548	ECJ2VB1H103K	ELECT	350V	10nF
C1549	ECJ2VB1H103K	ELECT	350V	10nF
C1550	ECJ2VB1H103K	ELECT	350V	10nF
C1551	ECJ2VB1H103K	ELECT	350V	10nF
C1552	ECJ2VB1H103K	ELECT	350V	10nF
C1553	ECEA1CKA100B	ELECT	16V	10µF
C1554	ECJ2VB1H103K	ELECT	350V	10nF
C1555	ECJ2VB1C104K	ELECT	350V	100nF
C1556	ECUV1H270JCX	S.M. CAP	50V	27pF
C1557	ECUV1H270JCX	S.M. CAP	50V	27pF
C1558	ECJ2VB1H103K	ELECT	350V	10nF
C1559	ECEA1CKA100B	ELECT	16V	10µF
C1560	ECEA1CKA100B	ELECT	16V	10µF
C1561	ECJ2VB1C104K	ELECT	350V	100nF
C1562	ECJ2VB1C104K	ELECT	350V	100nF
C1563	ECJ2VB1C104K	ELECT	350V	100nF
C1564	ECJ2VB1C104K	ELECT	350V	100nF
C1566	ECUV1H270JCX	S.M. CAP	50V	27pF
C1567	ECEA1CKA100B	ELECT	16V	10µF
C1568	ECJ2VB1H103K	ELECT	350V	10nF
C1569	ECEA1CKA100B	ELECT	16V	10µF
C1570	ECJ2VB1H103K	ELECT	350V	10nF
C1571	ECJ2VB1H103K	ELECT	350V	10nF
C1572	ECEA1CKA100B	ELECT	16V	10µF
C1573	ECJ2VB1H103K	ELECT	350V	10nF
C1574	ECEA1CKA100B	ELECT	16V	10µF
C1575	ECEA1CKA100B	ELECT	16V	10µF
C1576	ECJ2VB1H103K	ELECT	350V	10nF
C1577	ECUV1H270JCX	S.M. CAP	50V	27pF
C1578	ECJ2VB1H103K	ELECT	350V	10nF

Cct Ref	Parts Number	Description		
C1579	ECJ2VB1H103K	ELECT	350V	10nF
C1580	ECJ2VB1H103K	ELECT	350V	10nF
C1581	ECJ2VB1C224K	ELECT	350V	220nF
C1582	ECJ2VB1C224K	ELECT	350V	220nF
C1583	ECJ2VB1C224K	ELECT	350V	220nF
C1584	ECJ2VB1C104K	ELECT	350V	100nF
C1585	ECEA1CKA100B	ELECT	16V	10µF
C1586	ECJ2VB1H103K	ELECT	350V	10nF
C1587	ECEA1CKA100B	ELECT	16V	10µF
C1588	ECEA1CKA100B	ELECT	16V	10µF
C1589	ECJ2VB1H103K	ELECT	350V	10nF
C1590	ECJ2VB1H103K	ELECT	350V	10nF
C1591	ECEA1CKA100B	ELECT	16V	10µF
C1592	ECUV1H271JCX	S.M. CAP	50V	270pF
C1594	ECUV1H271JCX	S.M. CAP	50V	270pF
C1596	ECUV1H271JCX	S.M. CAP	50V	270pF
C1603	ECUV1H271JCX	S.M. CAP	50V	270pF
C2101	ECUV1H102JCX	S.M. CAP	50V	1nF
C2102	ECUV1H102JCX	S.M. CAP	50V	1nF
C2103	ECUV1H102JCX	S.M. CAP	50V	1nF
C2104	ECUV1H102JCX	S.M. CAP	50V	1nF
C2105	ECUV1H102JCX	S.M. CAP	50V	1nF
C2106	ECUV1H102JCX	S.M. CAP	50V	1nF
C2107	ECUV1H102JCX	S.M. CAP	50V	1nF
C2108	ECUV1H102JCX	S.M. CAP	50V	1nF
C2109	ECUV1H102JCX	S.M. CAP	50V	1nF
C2110	ECUV1H102JCX	S.M. CAP	50V	1nF
C2111	ECA1CM100B	ELECT	16V	10µF
C2112	ECA1CM100B	ELECT	16V	10µF
C2113	ECA1HM3R3B	ELECT	50V	3R3µF
C2114	ECJ2VF1H104Z	ELECT	350V	100nF
C2117	ECUV1H221JCX	S.M. CAP	50V	220pF
C2118	ECUV1H221JCX	S.M. CAP	50V	220pF
C2119	ECUV1H221JCX	S.M. CAP	50V	220pF
C2120	ECUV1H221JCX	S.M. CAP	50V	220pF
C2121	ECA1CM100B	ELECT	16V	10µF
C2122	ECJ2VF1H104Z	ELECT	350V	100nF
C2123	ECUV1H221JCX	S.M. CAP	50V	220pF
C2124	ECUV1H560JCX	S.M. CAP	50V	56pF
C2125	ECUV1H470JCX	S.M. CAP	50V	47pF
C2126	ECUV1H560JCX	S.M. CAP	50V	56pF
C2127	ECUV1H010CCX	S.M. CAP	50V	1pF
C2128	ECUV1H010CCX	S.M. CAP	50V	1pF
C2129	ECA1CM102B	ELECT	16V	1000µF
C2130	ECA1CM331B	ELECT	16V	330µF
C2134	ECJ2VF1H103Z	ELECT	350V	10nF
C2135	ECA1CM101B	ELECT	16V	100µF
C2136	ECJ2VF1H104Z	ELECT	350V	100nF
C2137	ECA1CM100B	ELECT	16V	10µF
C2138	ECUV1H471KBX	S.M. CAP	50V	470pF
C2139	ECUV1H221JCX	S.M. CAP	50V	220pF
C2140	ECA1CM101B	ELECT	16V	100µF
C2141	ECUV1H152JCX	S.M. CAP	50V	1.5pF
C2301	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C2302	ECA1CM470B	ELECT	16V	47µF
C2303	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C2304	ECA1CM470B	ELECT	16V	47µF
C3001	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3002	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3003	ECA1CM470B	ELECT	16V	47µF
C3005	ECUV1H561JCX	S.M. CAP	50V	560pF
C3006	ECJ3VB1C474K	ELECT	3.5KV	470nF
C3007	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3008	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3009	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3010	ECA1CM470B	ELECT	16V	47µF

Cct Ref	Parts Number	Description		
C3012	ECUV1H561JCX	S.M. CAP	50V	560pF
C3013	ECJ3VB1C474K	ELECT	3.5KV	470nF
C3014	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3015	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3016	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3017	ECA1CM470B	ELECT	16V	47µF
C3019	ECUV1H561JCX	S.M. CAP	50V	560pF
C3020	ECJ3VB1C474K	ELECT	3.5KV	470nF
C3021	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3022	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3023	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3024	ECA1CM470B	ELECT	16V	47µF
C3026	ECUV1H561JCX	S.M. CAP	50V	560pF
C3027	ECJ3VB1C474K	ELECT	3.5KV	470nF
C3028	ECUV1H222JCX	S.M. CAP	50V	2.2nF
C3030	ECUV1H271JCX	S.M. CAP	50V	270pF
C3031	ECUV1H271JCX	S.M. CAP	50V	270pF
C3032	ECUV1H271JCX	S.M. CAP	50V	270pF
C3101	ECJ2YB1H104K	ELECT	350V	100nF
C3102	ECJ2VB1E104K	ELECT	350V	100nF
C3111	ECUV1H222KBX	S.M. CAP	50V	2.2nF
C3351	ECA1CM221B	ELECT	16V	220µF

TERMINALS AND LINKS

JK381	TJS1A5230B	CRT SOCKET	△
JK2301	JPJ841101320	RCA SOCKET	
JK3001	0350808500	21PIN TERMINAL	

SWITCHES

S801	ESB92S11B	SWITCH	△
S1201	EVQ21405R	SWITCH	
S1202	EVQ21405R	SWITCH	
S1203	EVQ21405R	SWITCH	
S1204	EVQ21405R	SWITCH	
S1205	EVQ21405R	SWITCH	

RELAYS

RL801	TSE1885-1	RELAY	△
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DIFFERENCES FOR MODEL TX--25LK10F

EXPLODED VIEW

17	TKU8E00611	BACK COVER	△
18	A59EAK071X54	C.R.T.	△
19	TKY8E531-1	CABINET	
20	TLK8E05162	DEGAUSS COIL	△
21	TNP8EE013BS	E P.C.B.	△
22	ZTFM05012A	F.B.T.	△
23	TBM8E2049	MODEL LABEL	
24	TNP8EP017AK	P P.C.B.	△

MISCELLANEOUS COMPONENTS

TBM8E2015	PRESET LABEL	
TPC8E4832	CARTON	
TPD8E728	TOP CUSHION	
TPD8E729	BOTTOM CUSHION	

INSTRUCTION BOOKS

TQB8E2987A-1	GERMAN	
TQB8E2987B	DUTCH	
TQB8E2987C-1	ITALIAN	
TQB8E2987D-1	FRENCH	
TQB8E2987E	SPANISH	
TQB8E2987F	SWEDISH	
TQB8E2987G	NORWEGIAN	
TQB8E2987H	FINNISH	
TQB8E2987K	DANISH	

Cct Ref	Parts Number	Description
I.C.s		
IC451	LA7845N	VERTICAL OUTPUT
IC1103	XLM3-01FFZ	EAROM
DIODES		
D456	MTZJT-777.5B	DIODE
D458	T3A206022	DIODE
D617	MA3068MTX	DIODE
D3101	MTZJT-778.2C	DIODE
D3102	MTZJT-778.2C	DIODE
COILS		
J26	EXCELD35V	COIL
L581	ELHKL028B	COIL
L582	ELC18B221E	COIL
L583	ELC10D3R3E	COIL
L584	ELHKL061B	COIL
L3101	ELEBT6R8KA	COIL
L3102	ELEBT6R8KA	COIL
RESISTORS		
JA200	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
R460	ERG1SJ471P	METAL 1W 5% 470 Ω
R465	ERJ6GEYJ821	S.M.CARB 0.1W 5% 820 Ω
R555	ERQ12HKR33P	FUSIBLE 0.5W 10% R33 Ω
R559	ERQ12HKR33P	FUSIBLE 0.5W 10% R33 Ω
R3105	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100 Ω
R3106	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100 Ω
R3107	ERJ6GEYJ153	S.M.CARB 0.1W 5% 15K Ω
R3108	ERJ6GEYJ153	S.M.CARB 0.1W 5% 15K Ω
CAPACITORS		
C551	ECKW3D331JBN	CERAMIC 2kV 330pF
C581	ECWF4564JBB	FILM 400V 560nF
C582	ECWF4474JBB	FILM 400V 470nF
C584	ECWH20432JVB	FILM 200V 4.3nF
C586	ECQF4103JZH	FILM 400V 10nF
C2115	ECUV1H221JCX	S.M. CAP 50V 220pF
C2116	ECUV1H221JCX	S.M. CAP 50V 220pF
C3103	ECUV1H561JCX	S.M. CAP 50V 560pF
C3104	ECUV1H561JCX	S.M. CAP 50V 560pF
C3105	ECUV1H561JCX	S.M. CAP 50V 560pF
C3106	ECUV1H561JCX	S.M. CAP 50V 560pF
C3107	ECA1HM470B	ELECT 50V 47μF
C3108	ECA1HM470B	ELECT 50V 47μF
TERMINALS AND LINKS		
JK3101	TJB16673	A.V. TERMINAL

DIFFERENCES FOR MODEL TX--28LK10F

EXPLODED VIEW

17	TKU8E00621	BACK COVER	△
18	A66ECF50X82	C.R.T.	△
19	TKY8E521-1	CABINET	
20	TLK8E05140	DEGAUSS COIL	△
21	TNP8EE013BM	E P.C.B.	△
22	ZTFM05008A	F.B.T.	△
23	TBM8E2052	MODEL LABEL	
24	TNP8EP017AJ	P P.C.B.	△

MISCELLANEOUS COMPONENTS

TBM8E2015	PRESET LABEL
TPC8E4831	CARTON
TPD8E726	TOP CUSHION
TPD8E727	BOTTOM CUSHION

INSTRUCTION BOOKS

TQB8E2987A-1	GERMAN
TQB8E2987B	DUTCH

Cct Ref	Parts Number	Description
	TQB8E2987C-1	ITALIAN
	TQB8E2987D-1	FRENCH
	TQB8E2987E	SPANISH
	TQB8E2987F	SWEDISH
	TQB8E2987G	NORWEGIAN
	TQB8E2987H	FINNISH
	TQB8E2987K	DANISH
I.C.s		
IC451	LA7876N	VERTICAL OUTPUT
IC1103	XLM3-02EFZ	EAROM
DIODES		
D456	MTZJT-775.6C	DIODE
D458	EU02V0	DIODE
D617	MA3068MTX	DIODE
D3101	MTZJT-778.2C	DIODE
D3102	MTZJT-778.2C	DIODE
COILS		
J26	EXCELD35V	COIL
L581	ELHKL026B	COIL
L582	ELC18B271E	COIL
L583	ELC18B150L	COIL
L584	ELHKL025B	COIL
L3101	ELEBT6R8KA	COIL
L3102	ELEBT6R8KA	COIL
RESISTORS		
JA200	ERJ8GEY0R00	S.M.CARB .125W 5% 0 Ω
R460	ERG3SJS151H	METAL 3W 5% 150 Ω
R465	ERJ6GEYJ102	S.M.CARB 0.1W 5% 1K Ω
R555	ERQ12HKR82P	FUSIBLE 0.5W 10% R82 Ω
R559	ERQ12HKR82P	FUSIBLE 0.5W 10% R82 Ω
R3105	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100 Ω
R3106	ERJ6GEYJ101	S.M.CARB 0.1W 5% 100 Ω
R3107	ERJ6GEYJ153	S.M.CARB 0.1W 5% 15K Ω
R3108	ERJ6GEYJ153	S.M.CARB 0.1W 5% 15K Ω
CAPACITORS		
C463	ECA1HM221B	ELECT 50V 220μF
C551	ECKW3D681JBN	CERAMIC 2kV 680pF
C581	ECWF4684JBB	FILM 400V 680nF
C582	ECWF4684JBB	FILM 400V 680nF
C584	ECWH20562JVB	FILM 200V 5.6nF
C586	ECQF4123JZH	FILM 400V 12nF
C2115	ECUV1H221JCX	S.M. CAP 50V 220pF
C2116	ECUV1H221JCX	S.M. CAP 50V 220pF
C3103	ECUV1H561JCX	S.M. CAP 50V 560pF
C3104	ECUV1H561JCX	S.M. CAP 50V 560pF
C3105	ECUV1H561JCX	S.M. CAP 50V 560pF
C3106	ECUV1H561JCX	S.M. CAP 50V 560pF
C3107	ECA1HM470B	ELECT 50V 47μF
C3108	ECA1HM470B	ELECT 50V 47μF
TERMINALS AND LINKS		
JK3101	TJB16673	A.V. TERMINAL

DIFFERENCES FOR MODEL TX--28SK10F

EXPLODED VIEW

17	TKU8E00621	BACK COVER	△
18	A66ECF50X82	C.R.T.	△
19	TKY8E523-1	CABINET	
20	TLK8E05140	DEGAUSS COIL	△
21	TNP8EE013BR	E P.C.B.	△
22	ZTFM05008A	F.B.T.	△
23	TBM8E2104	MODEL LABEL	
24	TNP8EP017AJ	P P.C.B.	△

Cct Ref	Parts Number	Description
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MISCELLANEOUS COMPONENTS

TBM8E2151	PRESET LABEL
TPC8E4834	CARTON
TPD8E726	TOP CUSHION
TPD8E727	BOTTOM CUSHION

INSTRUCTION BOOKS

TQB8E3118A	GERMAN
TQB8E3118B	DUTCH
TQB8E3118C	ITALIAN
TQB8E3118D	FRENCH
TQB8E3118E	SPANISH
TQB8E3118F	SWEDISH
TQB8E3118G	NORWEGIAN
TQB8E3118H	FINNISH
TQB8E3118K	DANISH

I.C.s

IC451	LA7876N	VERTICAL OUTPUT
IC1103	XLM3-02GFZ	EAROM

DIODES

D456	MTZJT-775.6C	DIODE
D458	EU02V0	DIODE

COILS

J26	T3A205016	COIL
L581	ELHKLBO26B	COIL
L582	ELC18B271E	COIL
L583	ELC18B150L	COIL
L584	ELHKLBO25B	COIL

RESISTORS

R460	ERG3SJS151H	METAL	3W	5%	150 Ω
R465	ERJ6GEYJ102	S.M.CARB	0.1W	5%	1K Ω
R555	ERQ12HKR82P	FUSIBLE	0.5W	10%	R82 Ω
R559	ERQ12HKR82P	FUSIBLE	0.5W	10%	R82 Ω

CAPACITORS

C463	ECA1HM221B	ELECT	50V	220μF
C551	ECKW3D681JBN	CERAMIC	2kV	680pF
C581	ECWF4684JBB	FILM	400V	680nF
C582	ECWF4684JBB	FILM	400V	680nF
C584	ECWH20562JVB	FILM	200V	5.6nF
C586	ECQF4123JZH	FILM	400V	12nF


TERMINALS AND LINKS

JK3101	TJB8E030	A.V. TERMINAL
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



Cct Ref	Parts Number	Description
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SCHEMATIC DIAGRAMS FOR MODELS TX-28LK10F, TX-25LK10F, TX-28SK10F (EURO-4H CHASSIS)

IMPORTANT SAFETY NOTICE

Components identified by  mark have special characteristics important for safety. When replacing any of these components, use only manufacturer's specified parts.

NOTES

1. RESISTOR
All resistors are carbon 1/4W resistor, unless marked otherwise.
Unit of resistance is OHM (Ω) (k=1,000, M=1,000,000)
2. CAPACITORS
All capacitors are ceramic 50V unless marked otherwise.
Unit of capacitance is μ F unless otherwise stated.
3. COIL
Unit of inductance is μ H, unless otherwise stated.
4. Components marked "L" on the schematic diagram shows leadless parts.
5. TEST POINT
 Test Point Position
6. EARTH SYMBOL
 Chassis Earth (Cold)  Line Earth (Hot)
7. VOLTAGE MEASUREMENT
Voltage is measured by a d.c. voltmeter.
Measurement conditions are as follows:
Power source a.c. 220V-240V, 50Hz
Receiving Signal Colour Bar signal (RF)
All customer controls Maximum position
8.  Indicates the Video signal path
 Indicates the Audio signal path

These schematic diagrams are the latest at time of printing and are subject to change without notice.

REMARKS






1. The Power Supply Circuit contains a circuit area which uses a separate power supply to isolate the earth connection. The circuit is defined by HOT and COLD indications in the schematic diagram. All circuits except the Power Circuit, are COLD. Take the following precautions :-
 - a. Do not touch the hot part, or the hot and cold parts at the same time, as you are liable to a shock hazard.
 - b. Do not short circuit the hot and cold circuits as electrical components may be damaged.
 - c. Do not connect an instrument, such as an oscilloscope, to the hot and cold circuits simultaneously as this may cause fuse failure. Connect the earth of the instruments to the earth connection of the circuit being measured.
 - d. Make sure to disconnect the power plug before removing the chassis.

ZEICHENERKLÄRUNG FÜR MODELL TX-28LK10F, TX-25LK10F, TX-28SK10F (EURO-4H CHASSIS)

WICHTIGER SICHERHEITSHINWEIS

Teile, die mit einem Hinweis  gekennzeichnet sind, sind wichtig für die Sicherheit. Sollte ein Auswechseln erforderlich sein, sind unbedingt Originalteile einzusetzen.

ANMERKUNG

1. WIDERSTÄNDE
Alle 1/4W Widerstände sind Kohlewiderstände, Abweichungen sind folgt gekennzeichnet.
Die Maßeinheit ist OHM (Ω) (k=1,000, M=1,000,000)
2. KONDENSATOREN
Alle Kondensatoren sind Keramikausführungen. Spannungsfestigkeit 50V. Abweichungen sind wie folgt gekennzeichnet. Die Maßeinheit ist μ F, wenn keine anderen Bezeichnungen genannt sind.
3. SPULEN
Die Maßeinheit ist μ H, Abweichungen sind gekennzeichnet.
4. Mit "L" gekennzeichnete Teile sind ohne Anschlußdrähte.
5. TESTPUNKTE
 Kennzeichnung der Testpunktposition
6. MASSE SYMBOL
 Erdung am Chassis  Erdung an Masse-Leitung
7. SPANNUNGSMESSUNG
Spannungsmessungen sind mit einem d.c.-Voltmeter durchzuführen. Die Meßbedingungen sind folgende:
Netzspannung a.c. 220V-240V, 50Hz
Wiedergabe Signal Farbbalken-Testbild
Wiedergabesignal Farbbalken-Testbild (HF)
8.  Videosignalweg
 Audiosignalweg

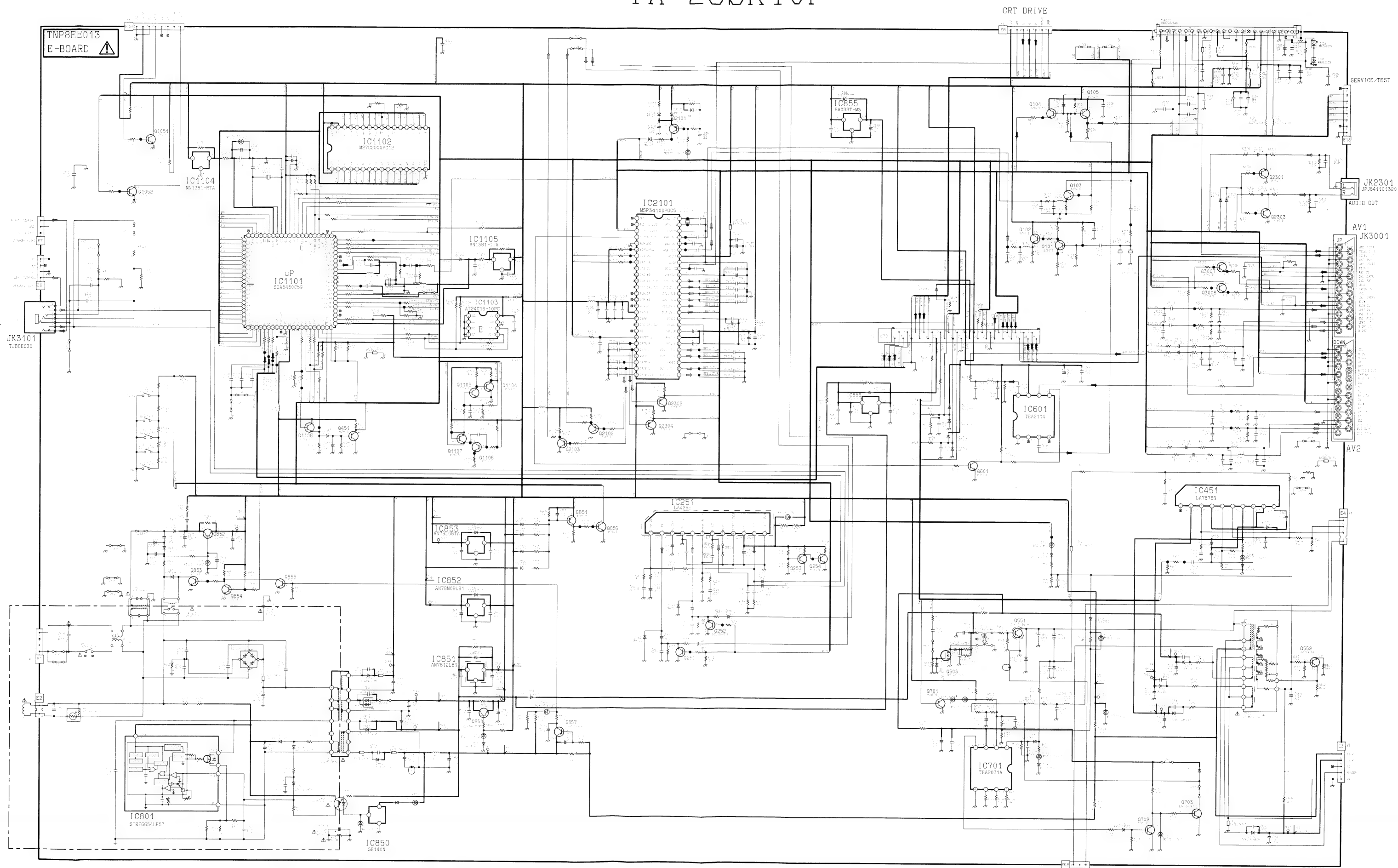
Änderungen im Laufe der Fertigung sind möglich.

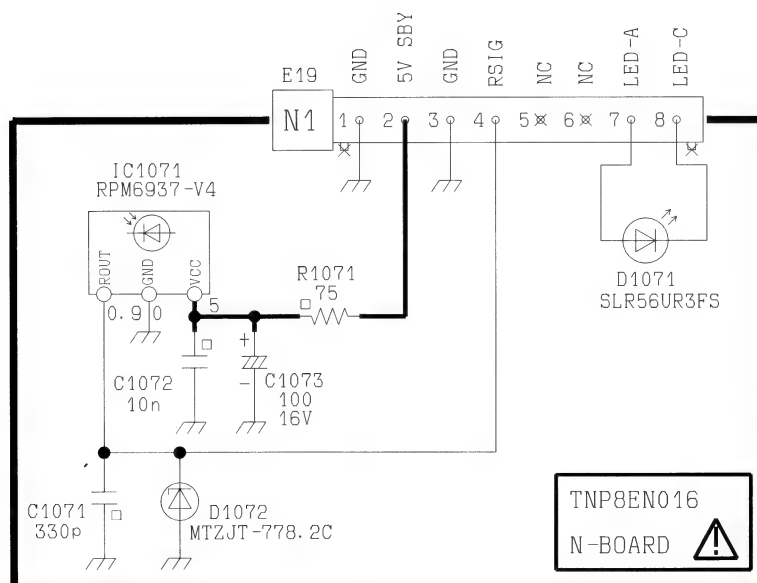
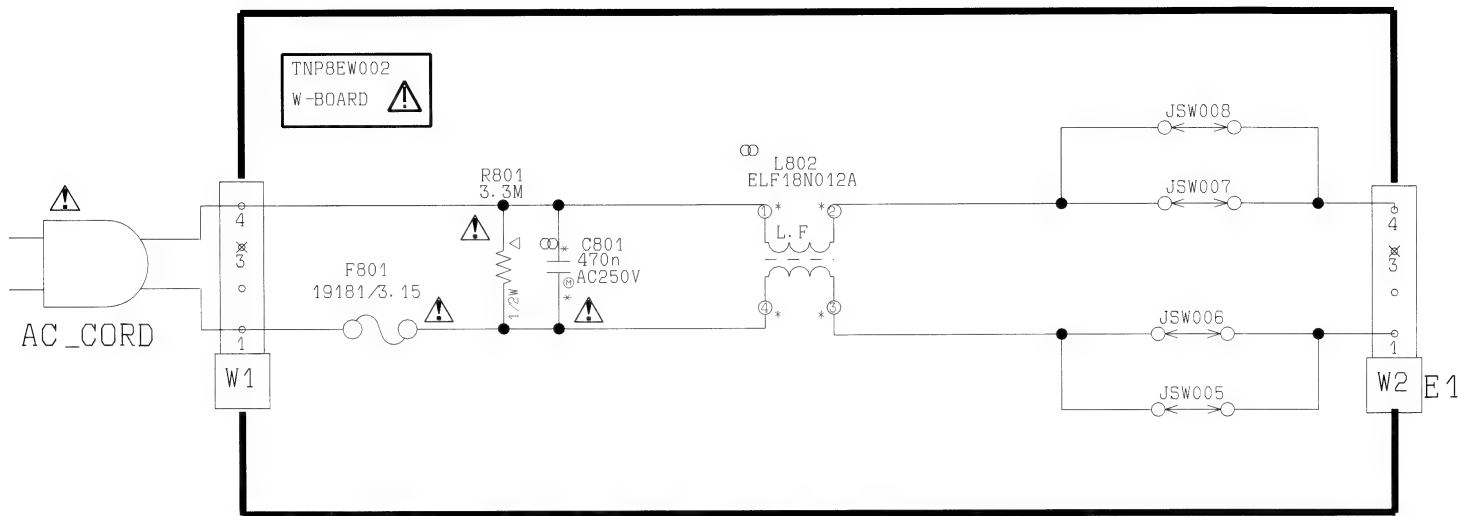
BEMERKUNGEN

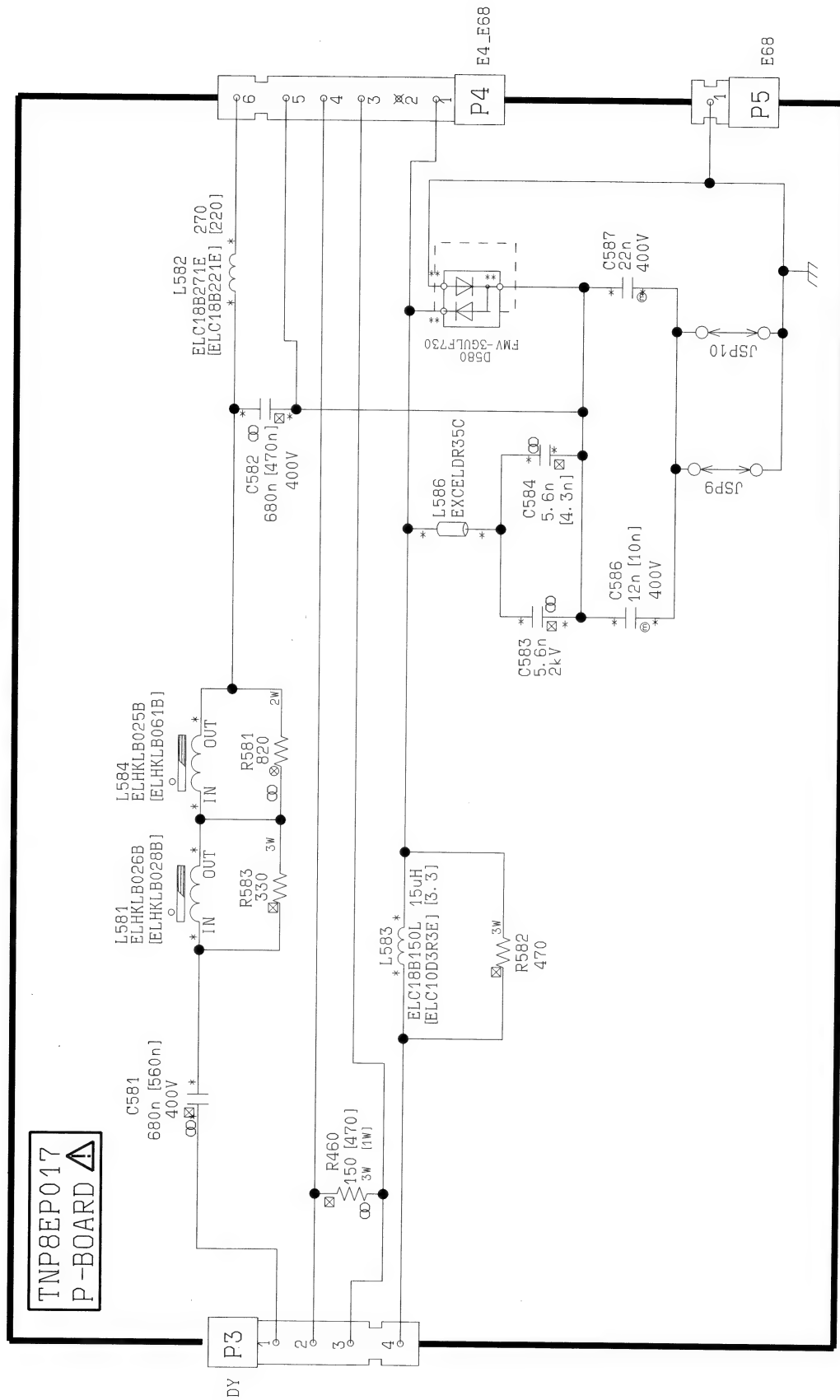
1. Das Schaltnetzteil enthält Bereiche, die direkt mit dem Netz verbunden sind. Diese Bereiche sind im Schaltplan mit HOT gekennzeichnet. Alle anderen Schaltungen sind mit COLD gekennzeichnet und haben keine direkte Verbindung mit dem Netz :-
 - a. Weder die Leitungen im heißen noch Leitungen im heißen und im kalten Bereich gleichzeitig berühren. Es besteht die Gefahr eines elektrischen Schlages.
 - b. Keinesfalls die Leitungen im heißen Bereich mit denen im kalten Bereich verbinden oder kurzschliessen. Dies kann zur Zerstörung von Bauteilen oder Sicherungen führen. Außerdem ist die elektrische Betriebssicherheit des Gerätes nicht mehr gegeben.
 - c. Keine Messinstrumente gleichzeitig an Leitungen im heißen und kalten Bereich anschliessen. Sicherungen könnten zerstört werden. Die Erde des Messinstrumentes immer mit der des zu prüfenden Schaltkreises verbinden.
 - d. Vor Ausbau des Chassis, Stecker aus der Netzsteckdose ziehen.

TX-28LK10F, TX-25LK10F

TX-28SK10F



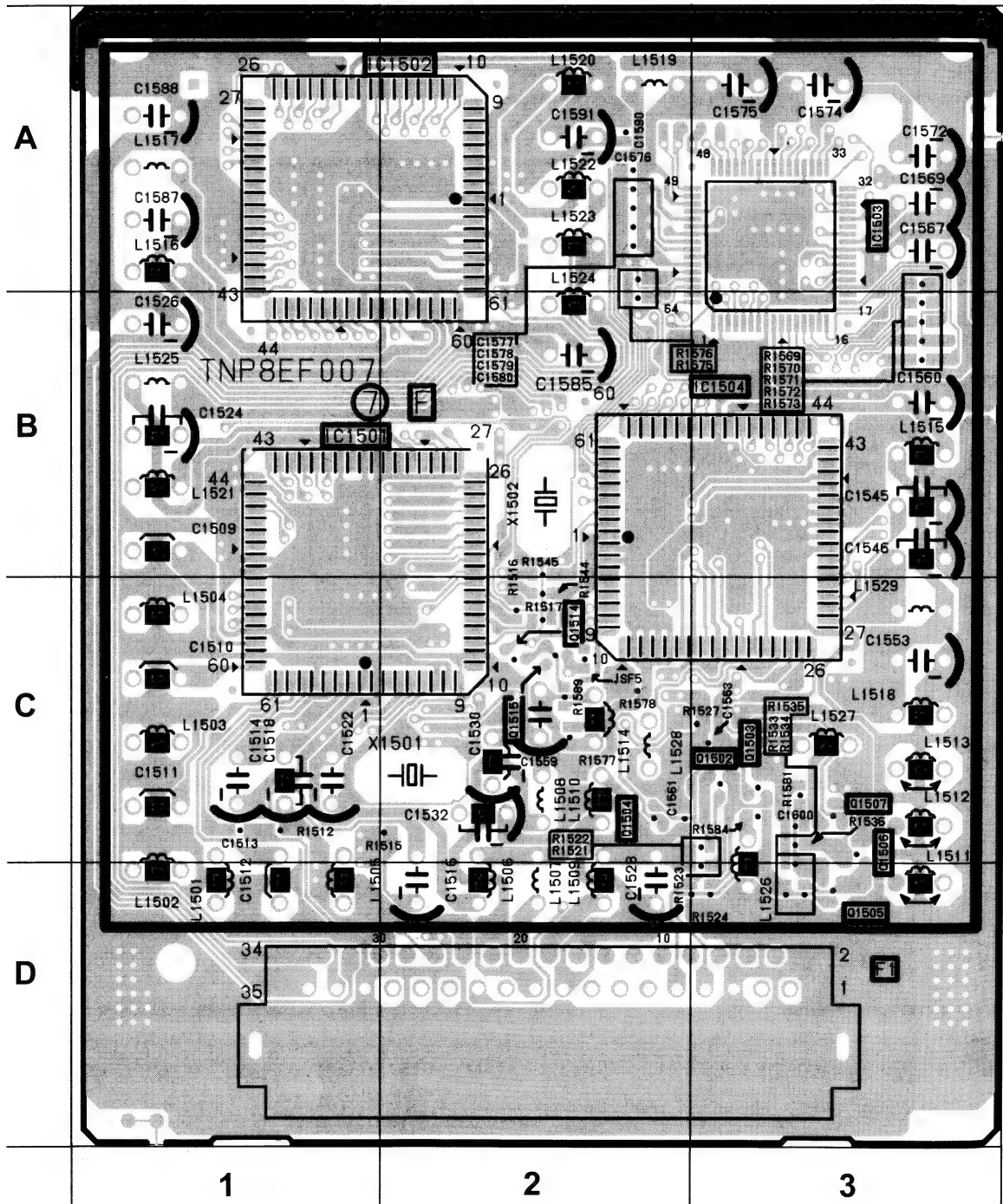




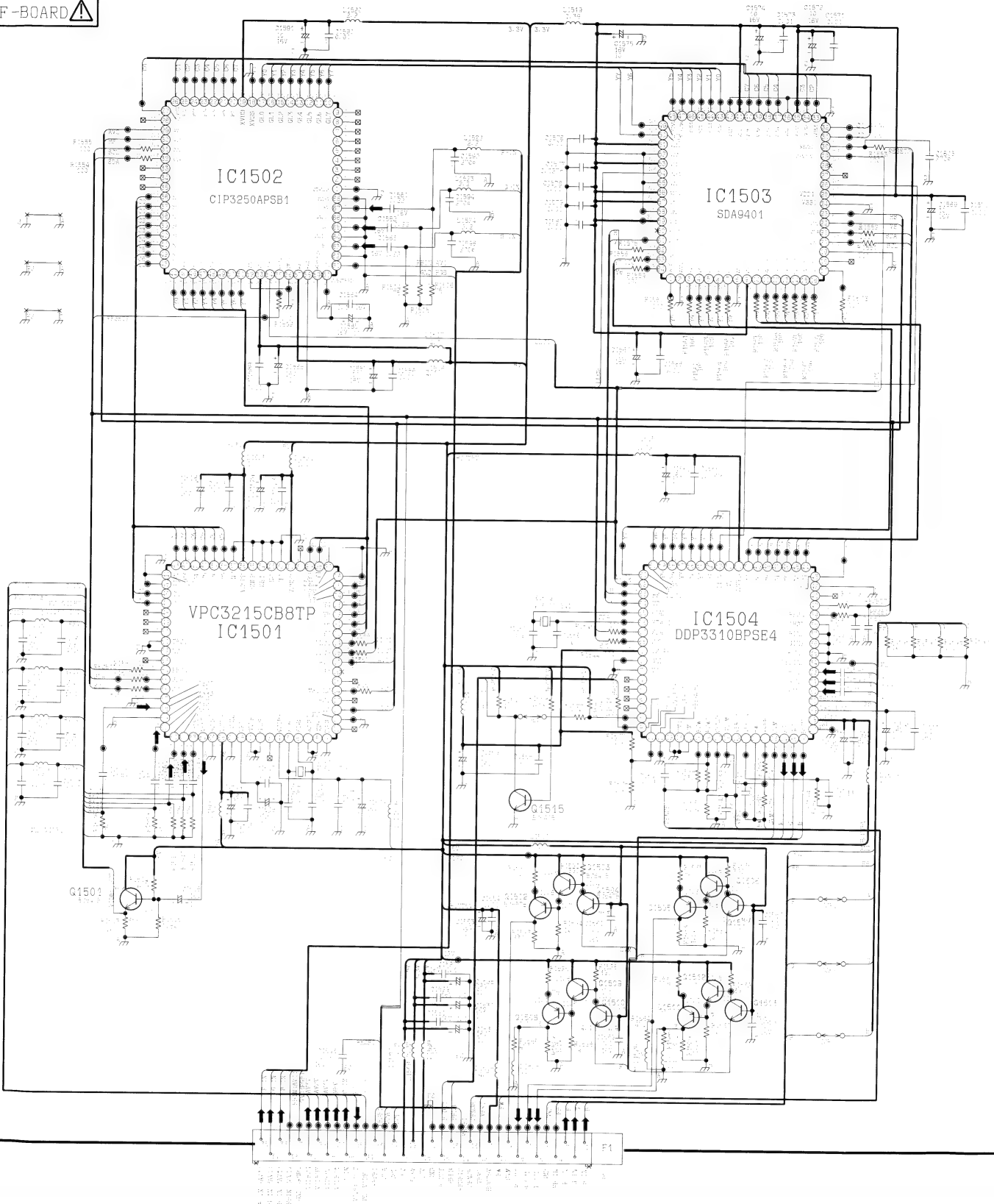
NOTE: The values in brackets [] refer to model TX-25LK10F.

F - BOARD TNP8EF007

TRAN'S	I.C.'S
Q1502 C3	IC1501 B1
Q1503 C3	IC1502 A2
Q1504 C2	IC1503 A3
Q1505 D3	IC1504 B3
Q1506 C3	
Q1507 C3	
Q1514 C2	
Q1515 C2	



TNP8EF007
F-BOARD

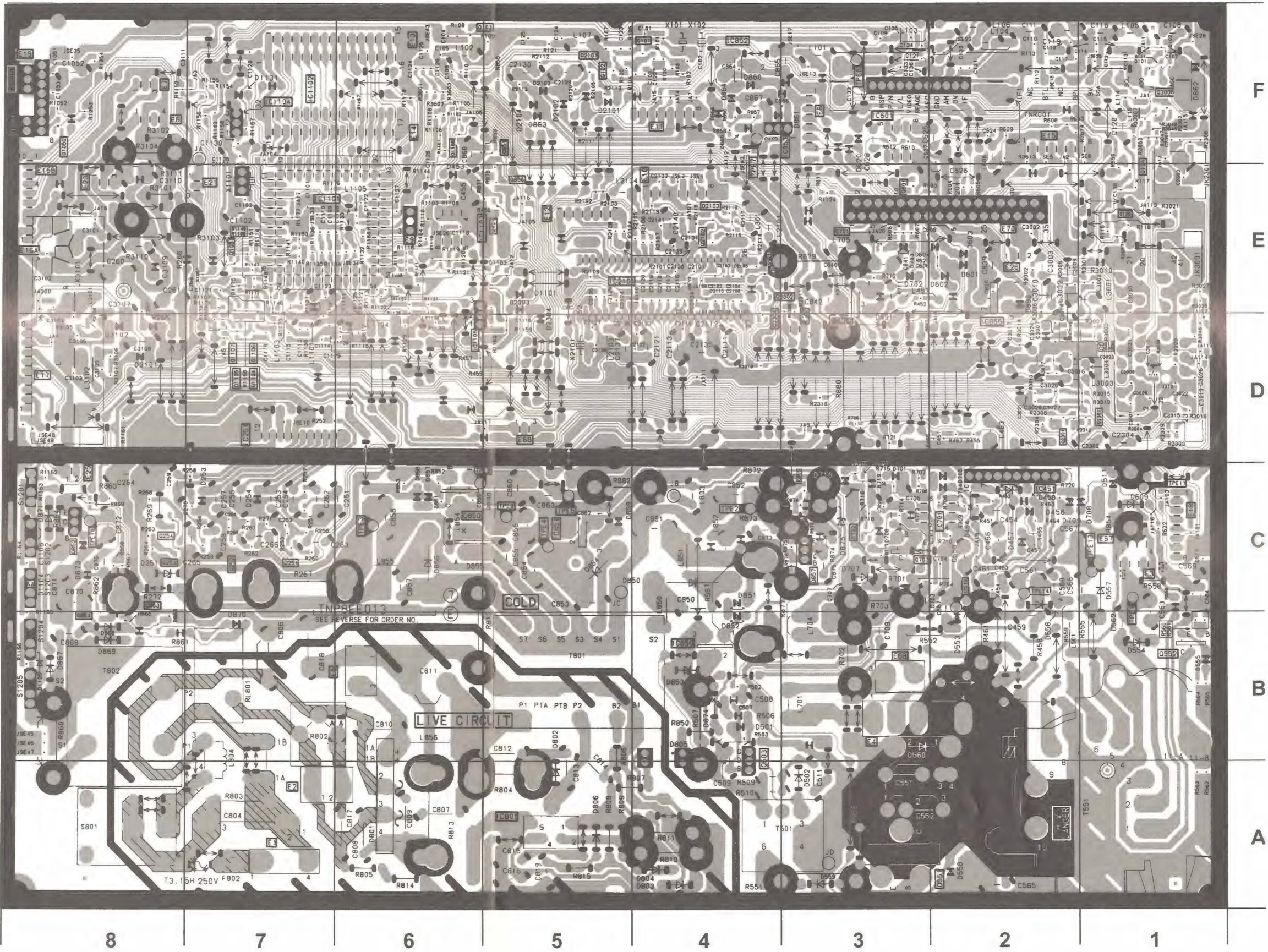


CONDUCTOR VIEWS FOR MODELS
ANSICHT DER LEITERBAHNEN FÜR
TX-28LK10F, TX-25LK10F, TX-28SK10F

E-BOARD TNP8EE013

TRAN'S		D2304	D5	D859	C4
Q101	F4	D3101*	D8	D860	F4
Q102	F5	D3102*	D8	D861	F3
Q103	F5	D251	C7	D862	F1
Q104	E1	D253	C7	D863	F5
Q105	E1	D254	C7	D864	F4
Q1051	E7	D453	E6	D865	F4
Q1052	F8	D454	C2	D866	F4
Q1104	D7	D456	C2	D867	B8
Q1105	D7	D457	C2	D868	B8
Q1106	D7	D458	C2	D869	B8
Q1107	D7	D501	B4	D870	B7
Q1108	F6	D502	A3	D871	C8
Q2101	F5	D511	C1	D873	C8
Q2102	E4	D553	B2	D874	B4
Q2103	D2	D554	B1	D875	C3
Q2302	E3	D556	A2	D890	E2
Q2303	D1	D557	C1	D891	E3
Q2304	D4	D558	C2		
Q251	C7	D560	B2	IC'S	
Q252	C7	D561	B1	IC1101	E6
Q253	C8	D562	C1	IC1102	F6
Q254	C8	D601	E2	IC1103	E6
Q3006	F1	D602	E2	IC1104	F7
Q3007	F1	D603	E2	IC1105	D5
Q451	E5	D604	E2	IC2101	E4
Q503	A4	D609	C1	IC251	D7
Q551	A3	D617*	D8	IC451	C2
Q552	B1	D620	F3	IC601	F3
Q601	E3	D701	C3	IC701	C2
Q701	E3	D702	E3	IC801	A4
Q702	C3	D703	E3	IC850	B4
Q703	C3	D704	C2	IC851	C5
Q850	C5	D705	C2	IC852	F4
Q851	F5	D706	C3	IC853	F3
Q852	C8	D707	C3	IC855	E2
Q853	B8	D708	C1	IC856	E3
Q854	B8	D709	C2		
Q855	C3	D710	C3	TP'S	
Q856	E5	D801	A6	TPE1	C1
Q857	C3	D803	A4	TPE2	C4
		D804	A4	TPE3	C6
DIODES		D805	B4	TPE4	C5
D101	F1	D806	A4	TPE5	C5
D102	F1	D850	C4	TPE6	F3
D1101	F1	D851	C4	TPE7	F4
D1131	F7	D852	B4	TPE8	C5
D2101	F5	D853	B4	TPE9	C6
D2102	F5	D854	C5	TPE10	C8
D2103	F5	D855	C5	TPE11	C1
D2104	F5	D856	C6	TPE12	C2
D2105	F5	D857	C6	TPE13	C1
D2303	D5	D858	C6	TPE14	C2

* not used for TX-28SK10F model



INP8EY018

SEE REVERSE FOR ORDER NO.

E.V. DANGER

A

B

C

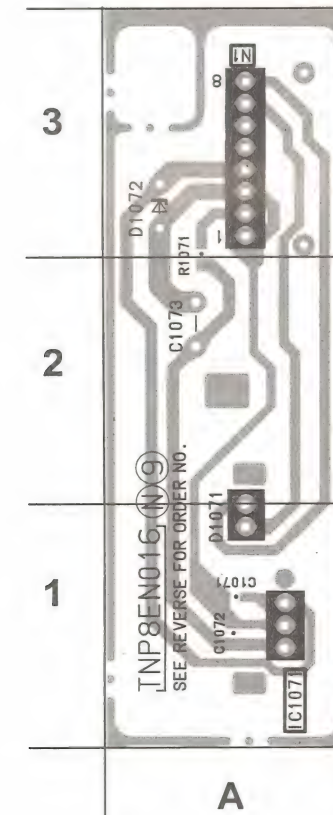
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1

2

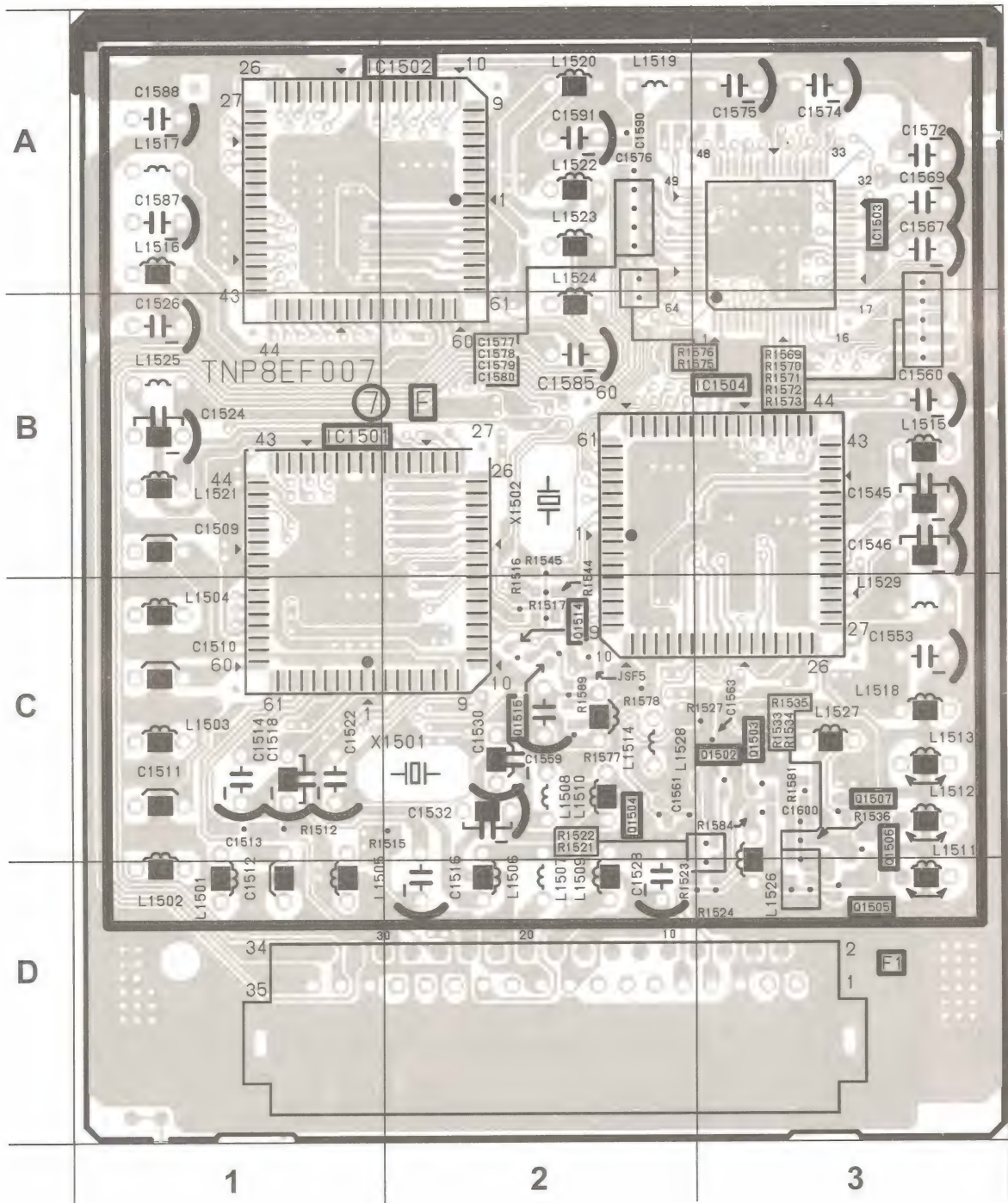
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DIODES	
D1071	A1
D1072	A3
I.C.'S	
IC1071	A1



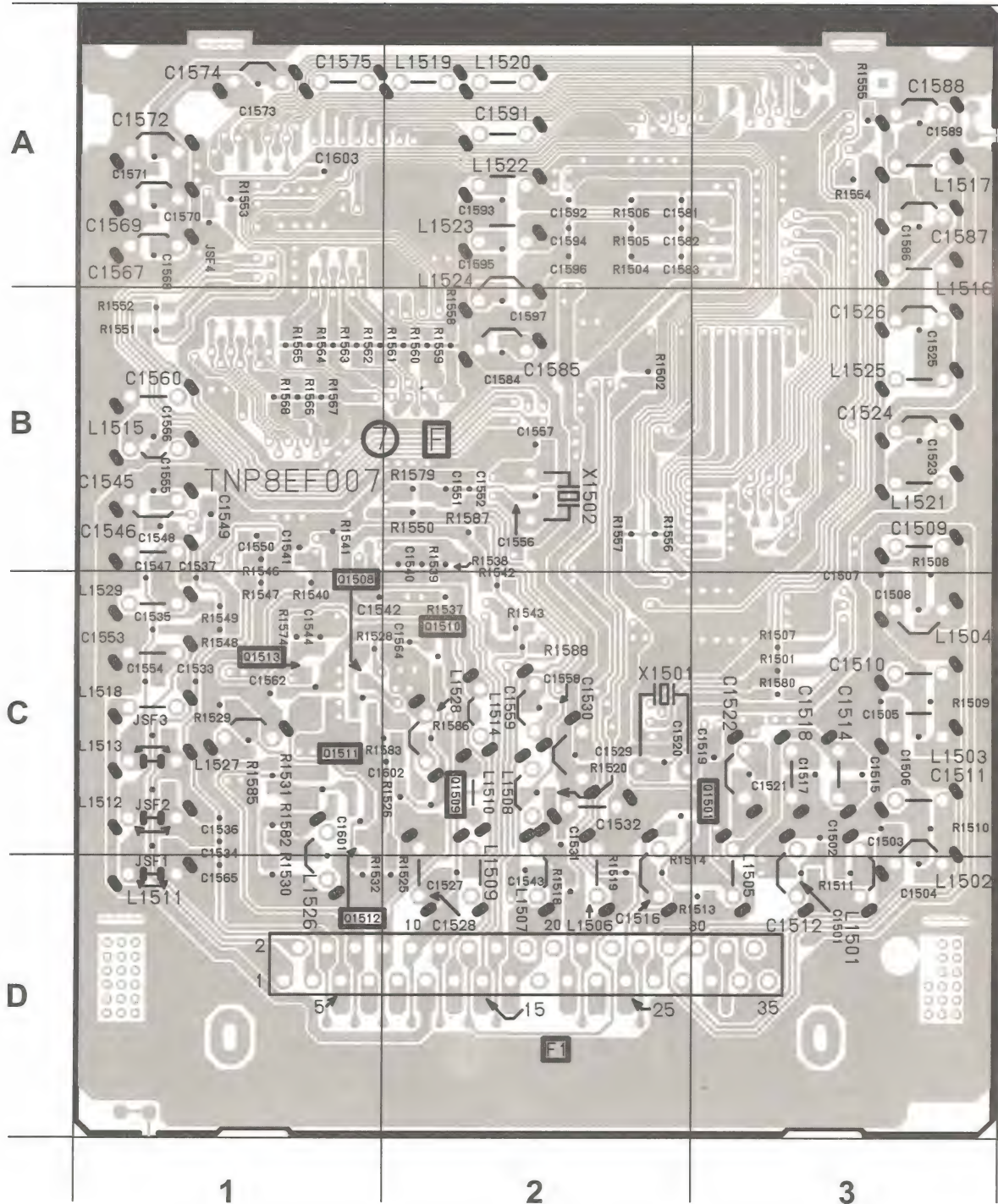
F - BOARD TNP8EF007

TRAN'S		I.C.'S	
Q1502	C3	IC1501	B1
Q1503	C3	IC1502	A2
Q1504	C2	IC1503	A3
Q1505	D3	IC1504	B3
Q1506	C3		
Q1507	C3		
Q1514	C2		
Q1515	C2		



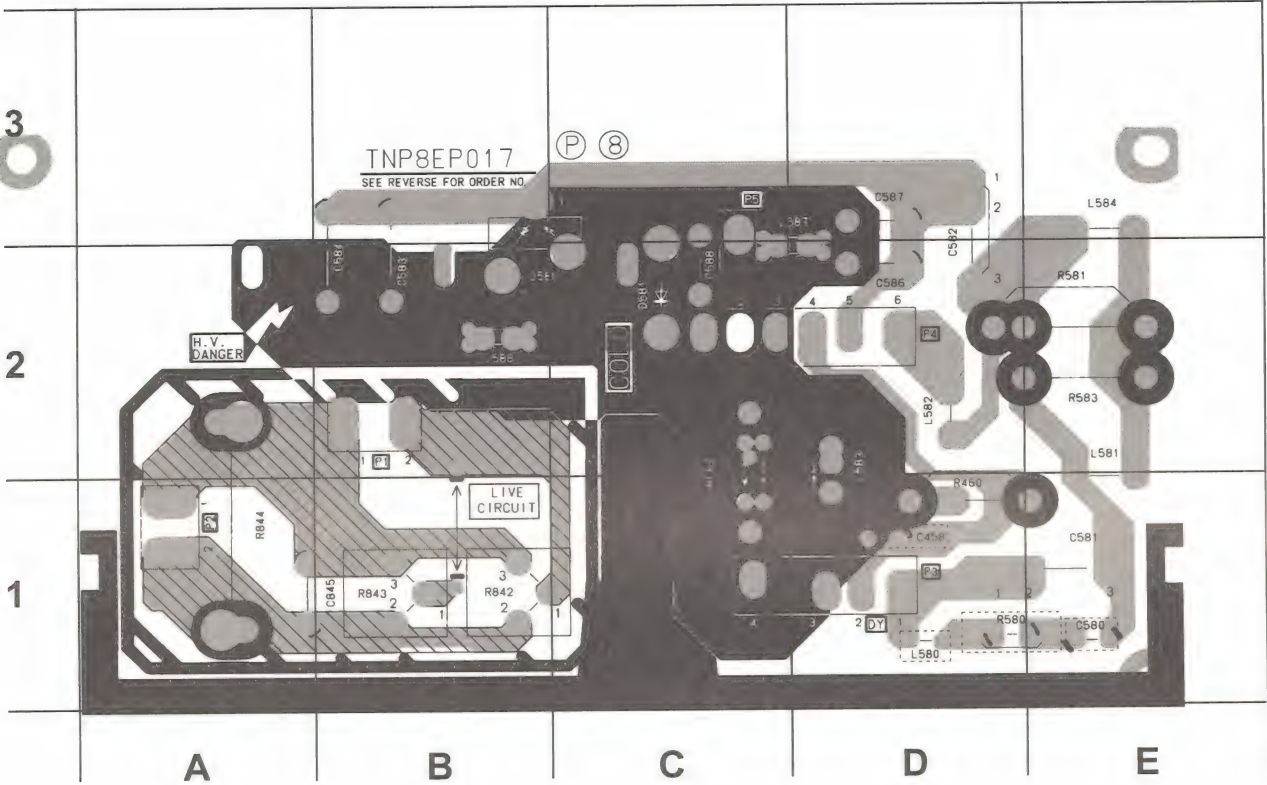
F - BOARD TNP8EF007

TRAN'S	
Q1501	C3
Q1508	C1
Q1509	C2
Q1510	C2
Q1511	C1
Q1512	D1
Q1513	C1



P - BOARD TNP8EP017

DIODES	
D580	B2



SUPPLEMENT 1 :**CHANGE OF CRT
FOR MODELS****TX-28LK10F, TX-28SK10F****NACHTRAG 1:****BILDSCHIRMÄNDERUNG
FÜR MODELLE****TX-28LK10F, TX-28SK10F****DIFFERENCE LIST**

Description	Before change	After change
C463	ECA1HM221B	NIL
C551	ECKW3D681JBN	ECKW3D471KBN
C581	ECWF4684JBB	ECWF4824JBB
C582	ECWF4684JBB	ECWF4514JBB
C583	ECWH20562JVB	ECWH20472JVB
CRT	A66ECF50x82	A66EAK075x54
D456	MTZJT-775.6C	MTZJT-777.5B
D458	EU02VO	T3A206022
IC451	LA7876N	LA7845N
L582	ELC18B271E	ELC18B221E
L583	ELC18B150L	ELC10D3R3E
L584	ELHKLB025B	ELHKLB061B
R460	ERG3SJS151H	ERG1SJ471P
R465	ERJ6GEYJ102V	ERJ6GEYJ821V
R555	ERQ12HKR82P	ERQ12HKR33P
R559	ERQ12HKR82P	ERQ12HKR33P
T551	ZTFM050008A	ZTFM05012A
ADJUSTMENT PROCEDURE / ABGLEICH :		
B13	13,5V \pm 1V	16,5V \pm 1V
B14	- 14V \pm 1V	- 10V \pm 1V

NOTE: Change of CRT was implemented from the serial number of TV set NC-0630001.

HINWEIS: Bildschirmänderung wurde appliziert seit Serien-NR. des Fernsehgerätes NC-0630001.

SUPPLEMENT 2 :**POWER FACTOR CORRECTION
OF MODELS
TX-28LK10F, TX-28SK10F,
TX-25LK10F****NACHTRAG 2:****BEGRENZUNG DES
HARMONISCHEN STROMS FÜR
MODELLE TX-28LK10F,
TX-28SK10F, TX-25LK10F****DIFFERENCE LIST**

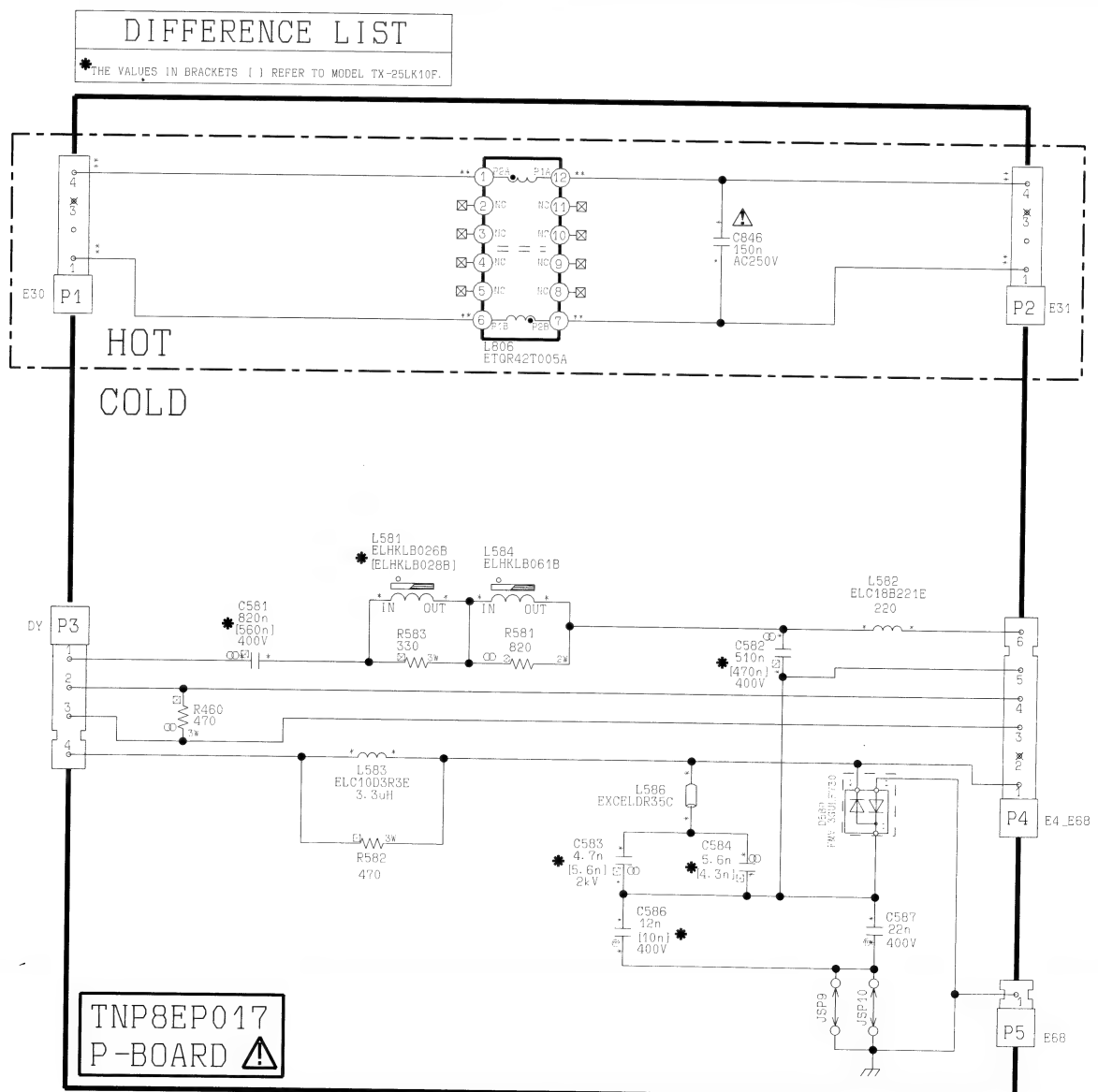
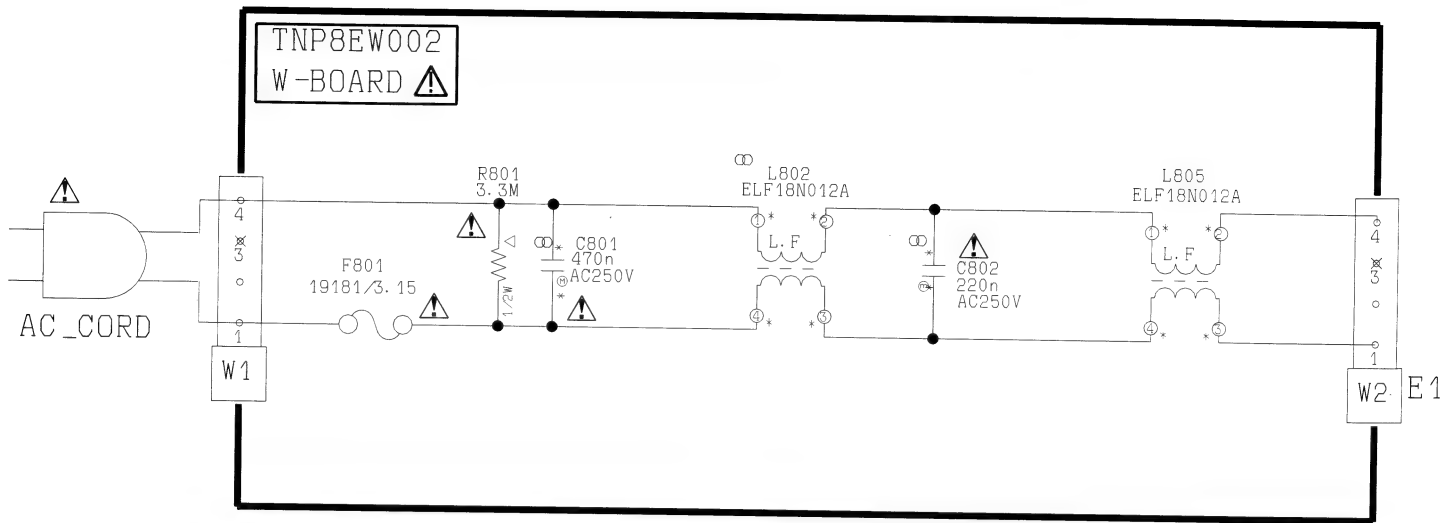
Description	Before correction	After correction
C572	NIL	ECJ2YB1H104K
C802	NIL	222233510224
C804	222233510224	NIL
C846	NIL	222233510154
D561	NIL	UDZTE-1722B
D562	NIL	1SS355TE-17
D703	T3A205016	NIL
E P.C.B.	TNP8EE013-7	TNP8EE013-6
E30	NIL	B3P4-VH-B-L
E31	NIL	B3P4-VH-B-L
J109	T3A206022	NIL
J147	T3A206022	NIL
J258	NIL	T3A206027
J259	NIL	T3A206027
J3	T3A205016	NIL
J324	NIL	T3A206032
J404	T3A206037	NIL
J426	T3A206037	NIL
JA203	NIL	ERJ6GEY0R00V
JA204	NIL	ERJ8GEY0R00V
JA205	NIL	ERJ6GEY0R00V
JA206	NIL	ERJ8GEY0R00V
JSE68	NIL	T3A205016
JSE69	NIL	T3A205016
JSE70	NIL	T3A206037
JSW005	T3A206022	NIL
JSW006	T3A206022	NIL
JSW007	T3A206022	NIL
JSW008	T3A206022	NIL
L804	ELF18N012A	NIL
L805	NIL	ELF18N012A
L806	NIL	ETQR42T005A
P P.C.B.	TNP8EP017-8	TNP8EP017-7
P1	NIL	B3P4-VH-B-L
P2	NIL	B3P4-VH-B-L
Q553	NIL	BC847B
R569	NIL	ERJ6GEYJ102V
R571	NIL	ERJ6GEYJ104V
R572	NIL	ERJ6GEYJ102V
R573	NIL	ERJ6GEYJ101V

NOTE: Power Factor Correction was implemented from the serial number of TV set :
 NG-0650001 - TX-25LK10F, NG-0640001 - TX-28LK10F,
 NG-1130001 - TX-28SK10F

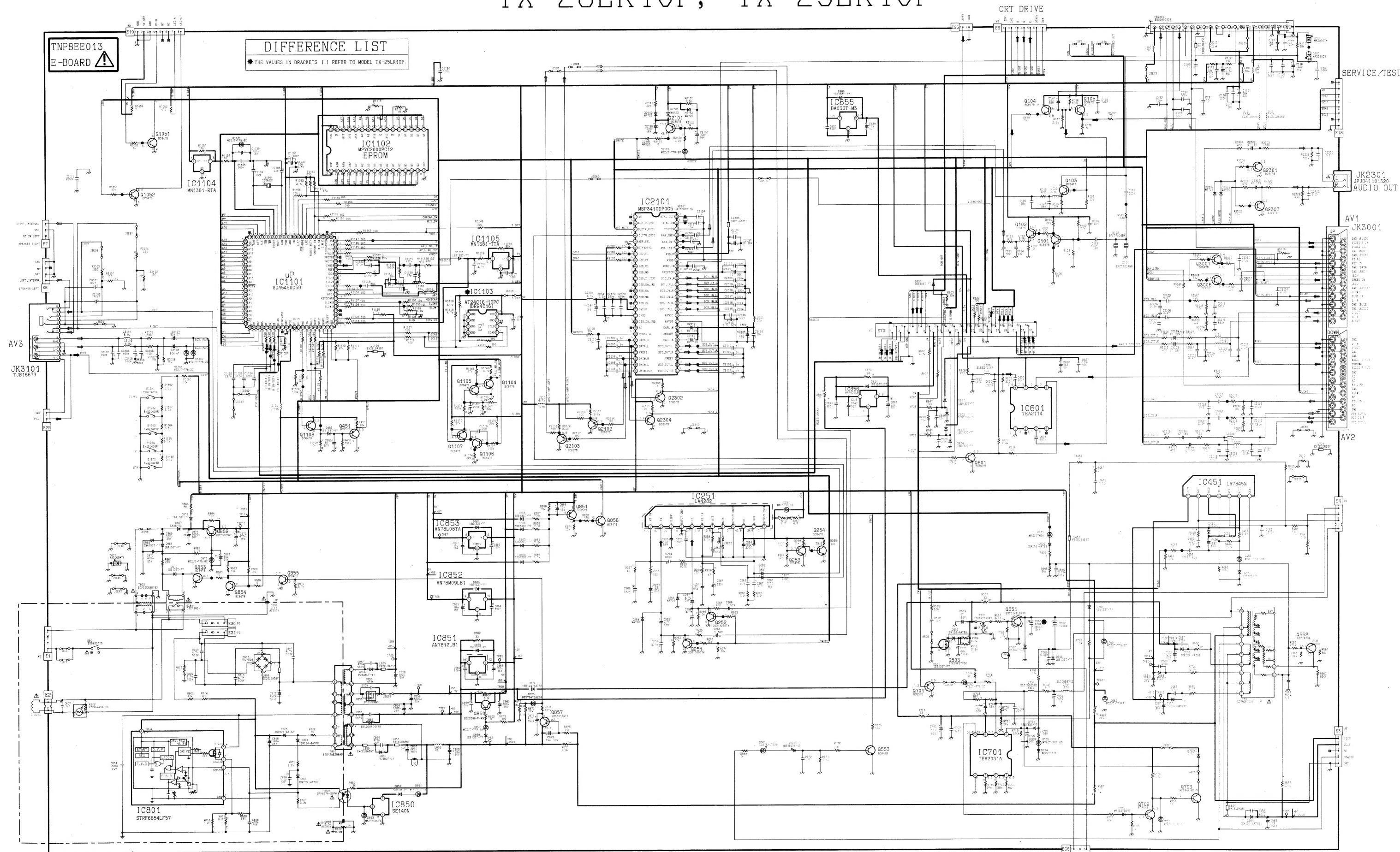
HINWEIS: Begrenzung des harmonischen Stroms wurde appliziert seit Serien-NR. des Fernsehgerätes:
 NG-0650001 - TX-25LK10F, NG-0640001 - TX-28LK10F,
 NG-1130001 - TX-28SK10F

MODIFIED SCHEMATIC DIAGRAMS AFTER CRT AND POWER FACTOR ALTERATION

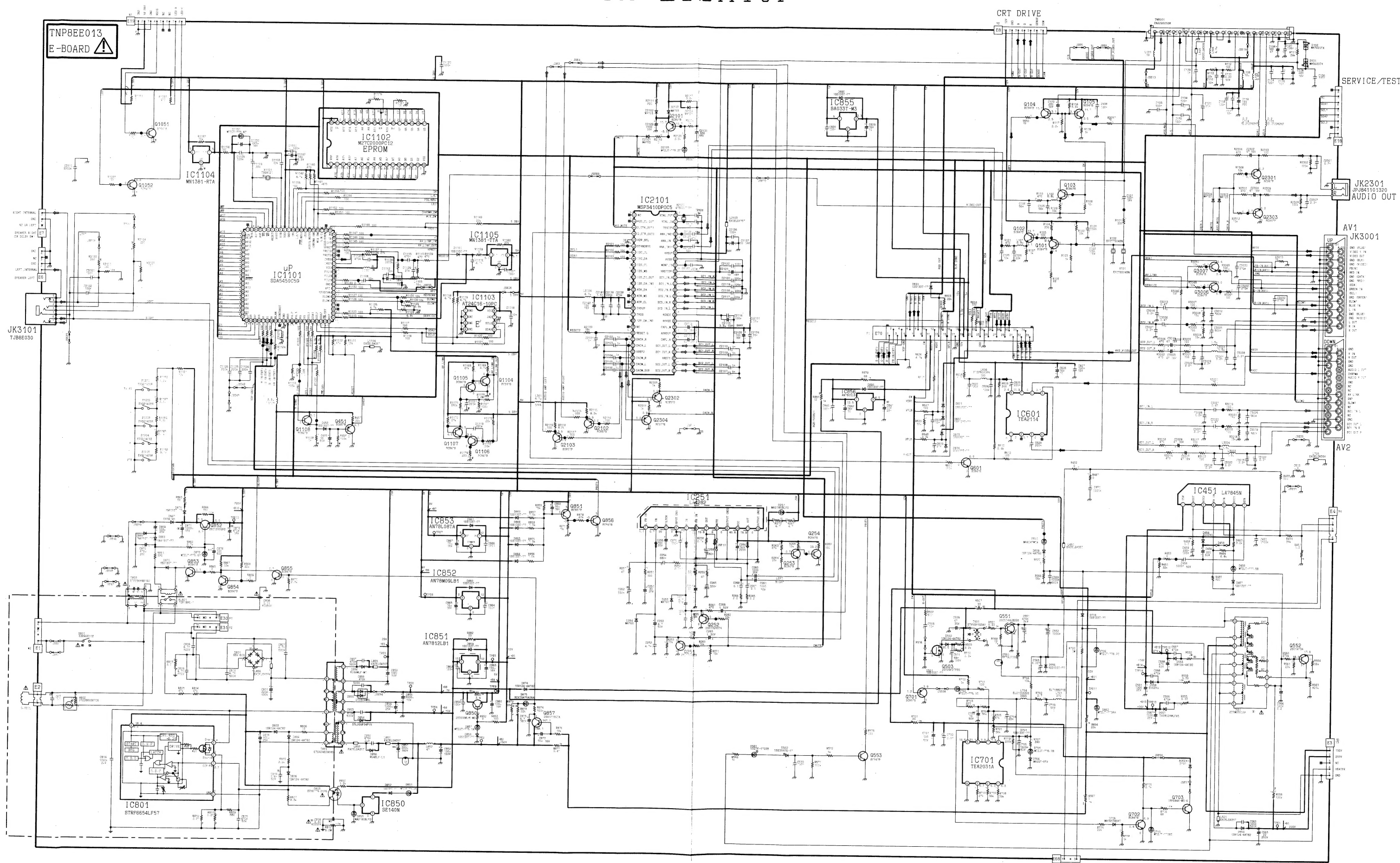
MODIFIZIERTE SCHEMATISCHE DIAGRAMME NACH DER BILDSCHIRMÄNDERUNG UND BEGRENZUNG DES HARMONISCHEN STROMS



TX-28LK10F, TX-25LK10F



TX-28SK10F



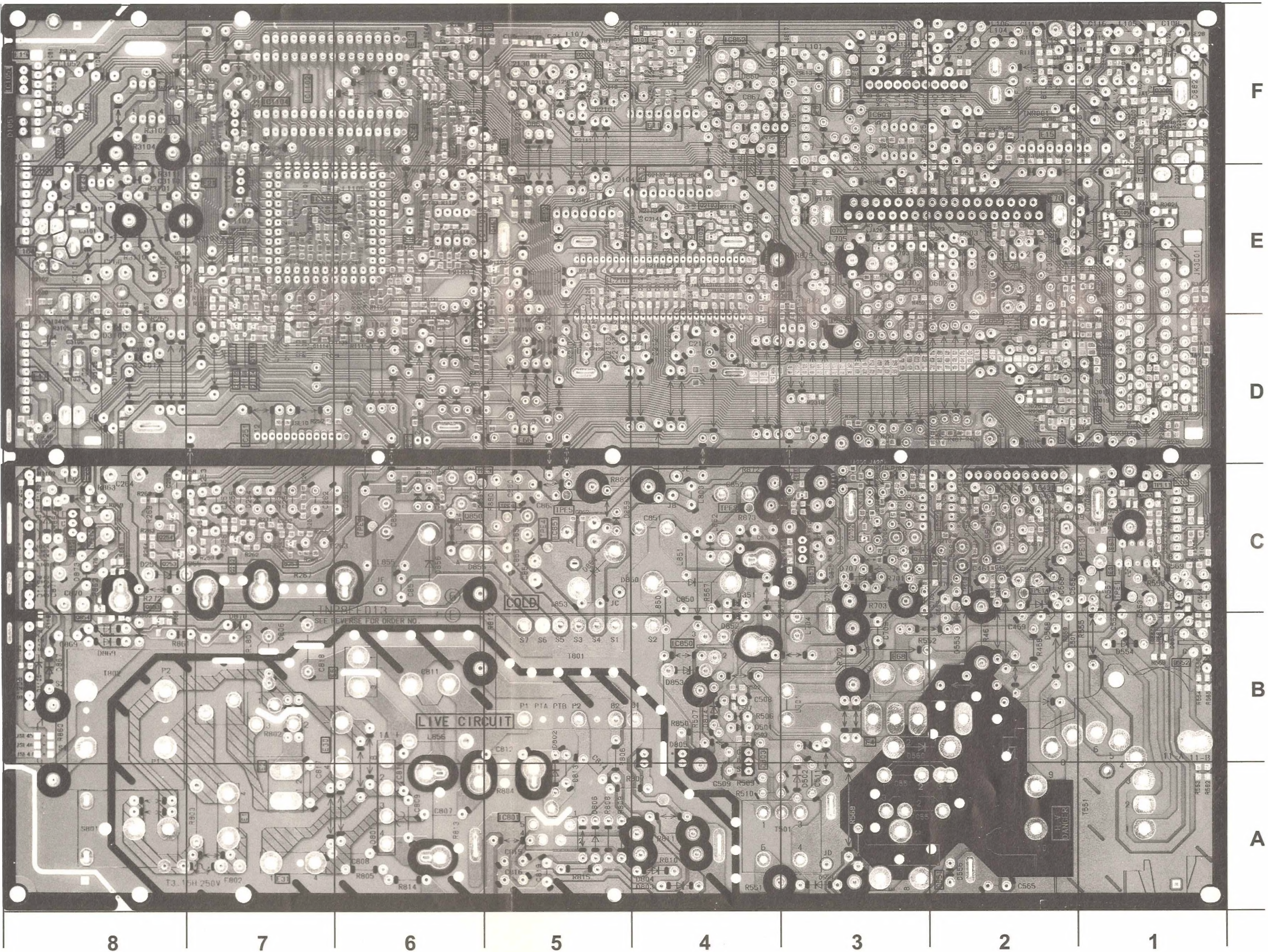
MODIFIED PCB AFTER CRT AND POWER FACTOR ALTERATION

MODIFIZIERTES PCB NACH DER BILDSCHIRMÄNDERUNG UND
BEGRENZUNG DES HARMONISCHEN STROMS

E-BOARD TNP8EE013 - 6

ADDED
COMPONENTS

TRAN'S	
Q553	C1
DIODES	
D561	B1
D562	C1



DIODES	
D580	B3

